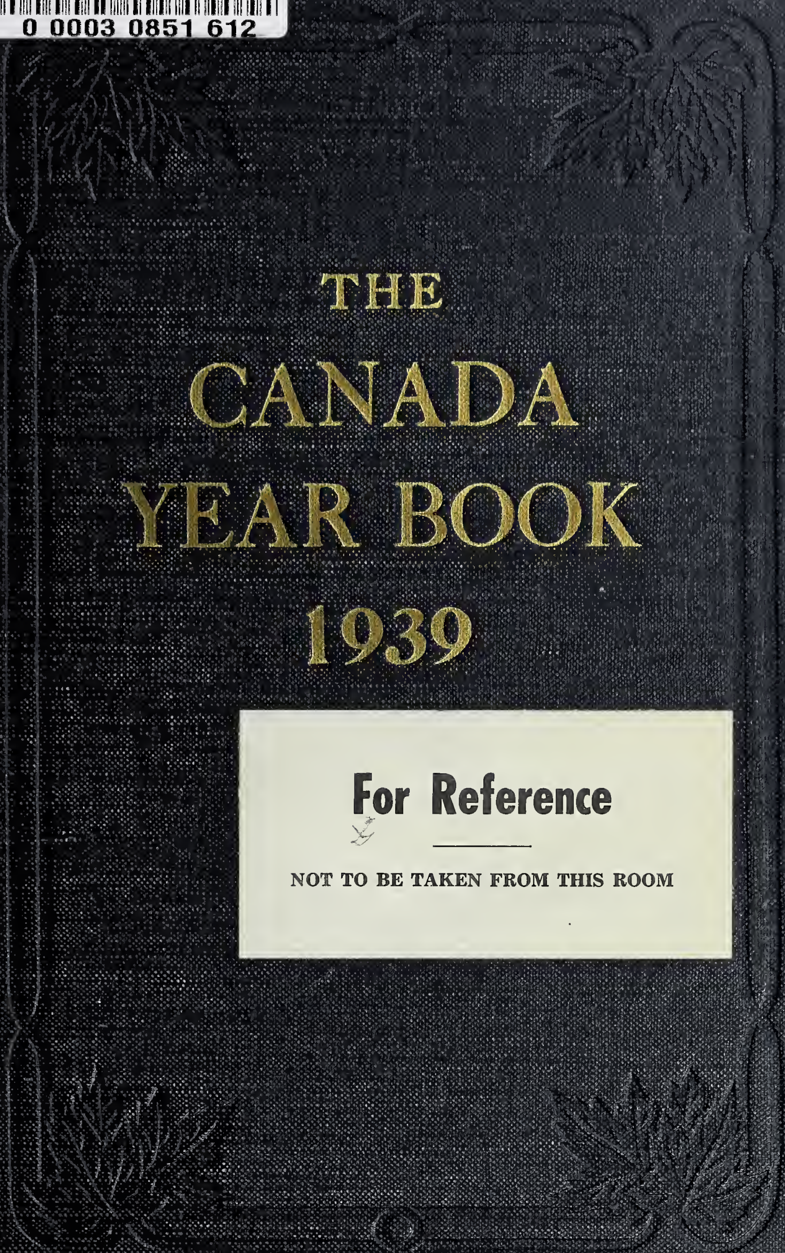
UNIVERSITY OF ALBERTA LIBRARY
0 0003 0851 612



THE
CANADA
YEAR BOOK
1939

For Reference

NOT TO BE TAKEN FROM THIS ROOM

FOR REFERENCE

NOT TO BE TAKEN FROM THIS ROOM

CAT. No. 1935 LOWE-MARTIN CO. LIMITED

Ex libris
Universitatis
Albertaensis

FOR LIBRARY USE
ONLY

[illegible]
GOVERNMENT
PUBLICATIONS

Digitized by the Internet Archive
in 2017 with funding from
University of Alberta Libraries

https://archive.org/details/canadayearbook191939cana

The
Royal Visit
To
Canada
May 17 To June 15
1939

For details of the Royal Tour, see pages 1155 to 1160.

His Majesty The King

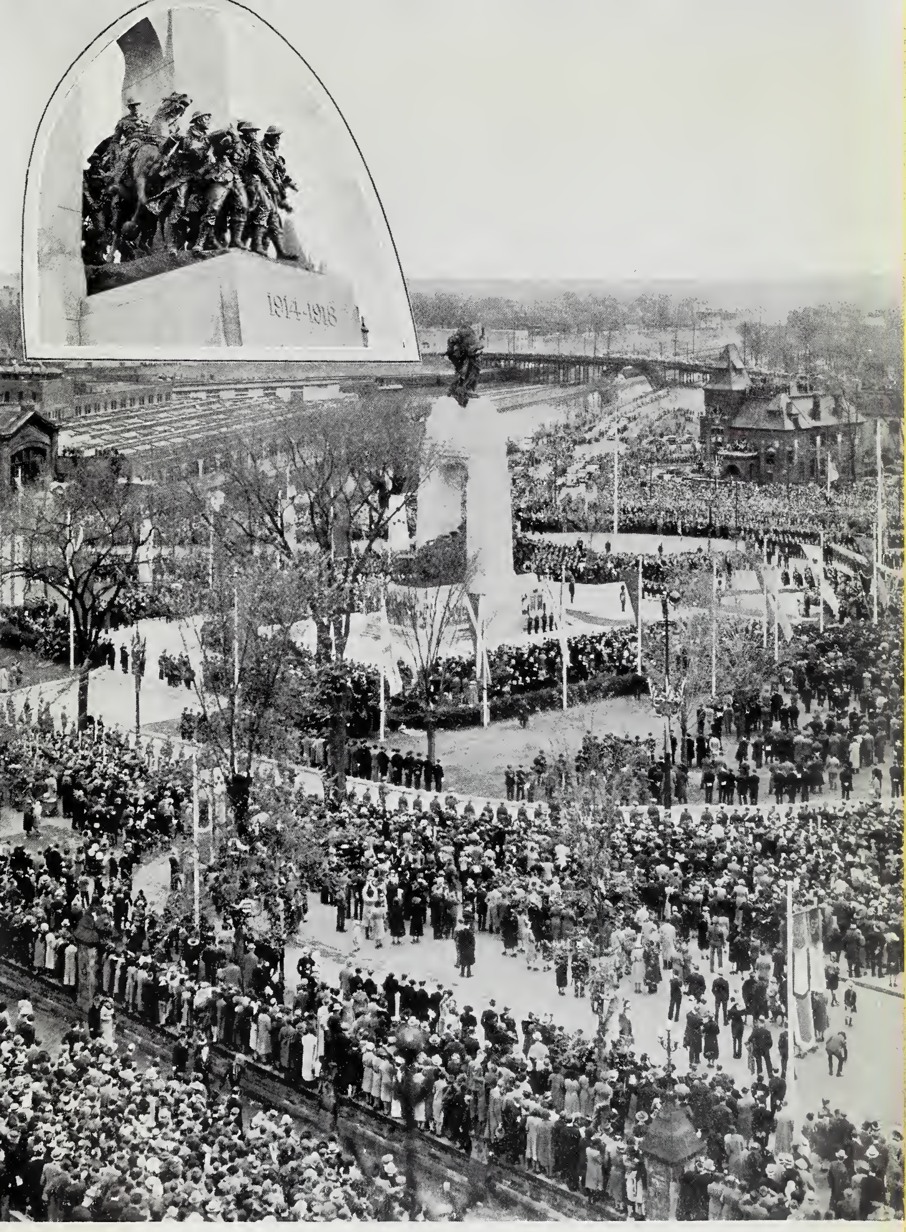
When His Majesty made his historic visit to the Senate Chamber, Ottawa, May 19, 1939, to give in person the Royal Assent to certain legislation of the 1939 Session of his Parliament of Canada, he wore the uniform of a Field Marshal. It is in this dress that the King is shown.

Photo, Copyright—Bertram Park, London.

Her Majesty The Queen

THIS PICTURE SHOWS THE QUEEN AS SHE WILL BE REMEMBERED BY THOSE WHO SAW HER MAJESTY WITH THE KING IN THE SENATE CHAMBER, OTTAWA, ON MAY 19, 1939.

Photo, Copyright—Dorothy Wilding, London.

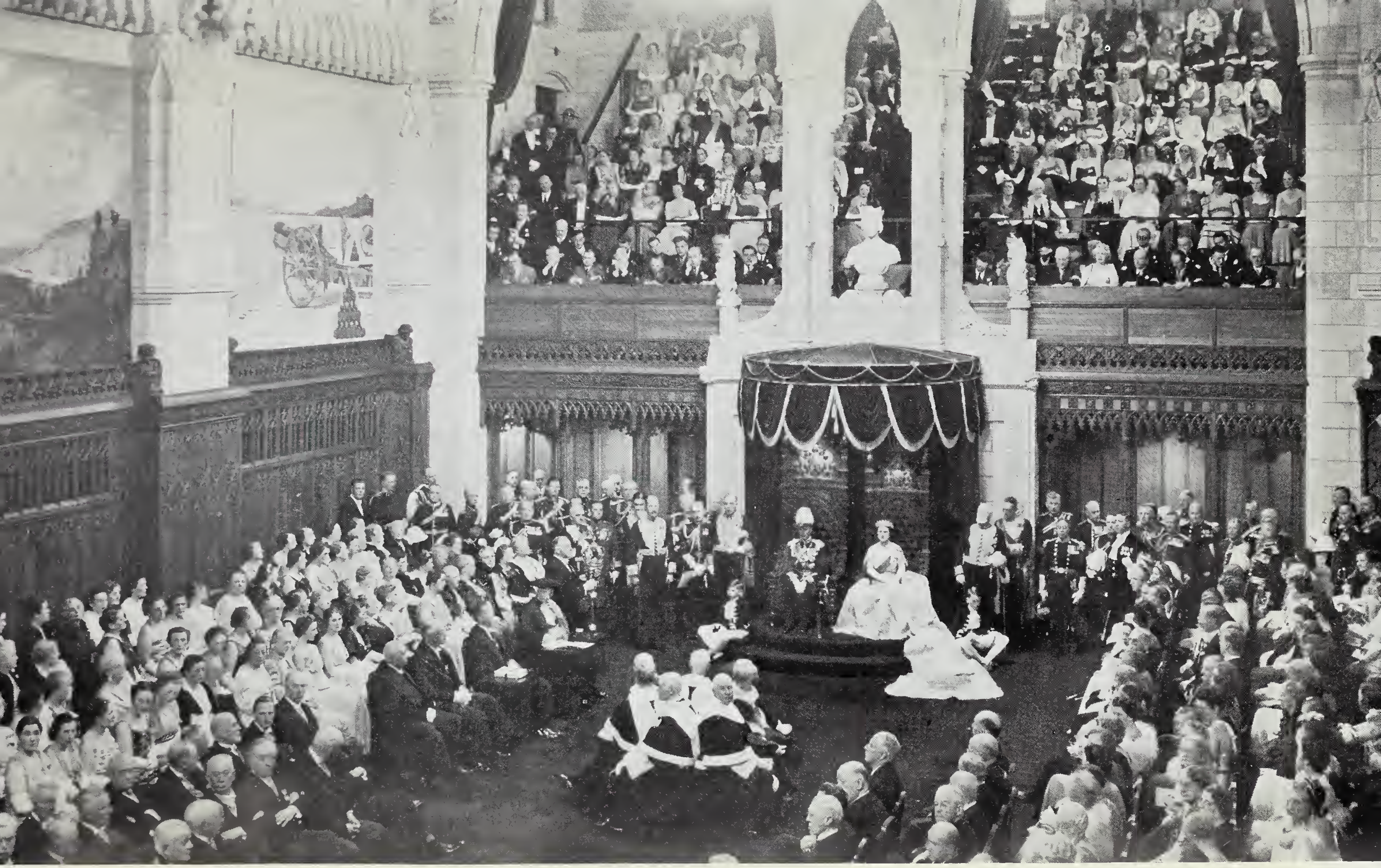


Crowds assembled before the National War Memorial just prior to the Official Unveiling by His Majesty King George VI, May 21, 1939. Inset: The main bronze group of the Memorial representing the "Great Response" of the men and women of Canada.

Courtesy, Canadian Government Motion Picture Bureau

THE ROYAL VISIT TO PARLIAMENT, MAY 19, 1939.—THEIR MAJESTIES TAKING THE SALUTE OF THE GUARD OF HONOUR BEFORE THE PARLIAMENT BUILDINGS, MAY 19, 1939.

Courtesy, Canadian Government Motion Picture Bureau.



Their Majesties Enthroned in the Senate Chamber.—The King addressed Parliament on May 19th, and gave the Royal Assent to certain Legislation passed during the 1939 Session.

Official Copy—Not for Sale*

DOMINION BUREAU OF STATISTICS
GENERAL STATISTICS BRANCH

DEPARTMENT OF TRADE AND COMMERCE, CANADA

THE CANADA YEAR BOOK

1939

THE OFFICIAL STATISTICAL ANNUAL OF THE RESOURCES, HISTORY, INSTITUTIONS, AND SOCIAL AND ECONOMIC CONDITIONS OF THE DOMINION

Published by Authority of
The Honourable William D. EULER, M.P.
MINISTER OF TRADE AND COMMERCE

OTTAWA
J. O. PATENAUDE, I.S.O.
KING'S PRINTER
1939

---

*Copies may be purchased from the King's Printer at $1·50.

LIBRARY OF THE UNIVERSITY
OF ALBERTA

PREFACE.

The Canada Year Book had its beginning in the first year of the Dominion when the semi-official "Year Book and Almanac of British North America"—being (to quote its sub-title) "an Annual Register of political, vital, and trade statistics, customs tariffs, excise and stamp duties, and all public events of interest in Upper and Lower Canada, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, and West Indies"— was founded. Subsequently the title was changed to "The Year Book and Almanac of Canada,—an annual statistical abstract of the Dominion and a register of legislation and of public men in British North America". It was published annually from 1867 to 1879.

In 1886, after the passing of a general Statistics Act, the "Statistical Abstract and Record of Canada" was instituted as an official book of reference respecting the institutions, population, finance, trade, and general conditions of the Dominion. The work was prepared in the General Statistical Office of the Department of Agriculture and was continued annually until 1904. In 1905, the General Statistical Office was amalgamated with the Census Office, and the Year Book was remodelled as "The Canada Year Book, Second Series" by Dr. Archibald Blue, Chief Officer.

In the re-organization of statistics which followed the report of the Royal Commission on Statistics of 1912, and the establishment of the Dominion Bureau of Statistics in 1918, the improvement of the Year Book was made a primary object and this progress has been continued down to the present time.

In a publication so broad in scope as the Year Book, under conditions where the content and variety of statistical data are continually changing and expanding, the editorial task of keeping the size of each edition within convenient limits is becoming more difficult year by year. But while it is no longer possible to cover adequately the entire field of information in a single edition, every effort is made when planning the publication to keep the framework intact and well-balanced, and to make reference to previously published material as easy as possible for the reader.

In the present edition, a complete list of special articles and of significant historical or descriptive text that has not been subject to wide change and is therefore not repeated, is given following the Table of Contents. This list links the 1939 Year Book with its predecessors and indicates the extent to which the 'Year Book' must now be regarded as a series of publications rather than as a single volume.

Among the more important of the new features incorporated in the present edition are the following: In Chapter II, an article on the Relationship of the Department of Public Archives to the Historical Records of Canada, followed by a Bibliography of Canadian History, contributed by Dr. Gustave Lanctot, LL.M., D.Litt., LL.D., K.C., F.R.S.C., Deputy Minister and Dominion Archivist, appears at pp. 34-40. In the introduction to Chapter VIII—Agriculture—an article on the Historical Background of Canadian Agriculture, by G. S. H. Barton, C.M.G., B.S.A., D.Sc.A., Deputy Minister, Department of Agriculture, appears at pp. 187-190. A special article on Noxious Forest Insects and Their Control, prepared by J. J. de Gryse, Ph. Cand. (Lov.), Chief, Forest Insect Investigations, Department of Agriculture, pp. 254-263, is an added feature of Chapter IX—Forestry. T. W. Grindley, Ph.D., Secretary, the Canadian Wheat Board, Winnipeg, has contributed an article on the Origin, Development, and Operations of the Canadian Wheat Board, which appears at pp. 569-580. An extended article on the Development of the Press in Canada, together with statistics for all the daily and the principal weekly newspapers and magazines, supplements Chapter XVIII where it appears at pp. 737-

104782

773. This article was prepared, under the direction of the Dominion Statistician, by A. E. Millward of the Year Book staff.

The extra space given to these special features this year more than accounts for the increase in the total number of pages in the volume. Indeed, the regular chapter material has been substantially condensed, without impairment of the treatment, by rearrangement and close editing. On the other hand, the statistical series of several chapters have been broadened by the inclusion of tables showing special census analyses that, it is considered, will be found useful to readers.

All parts of the volume have been carefully revised and brought up to date; the latest information appearing to the date when each section was sent to press is included. Under Section 1 of Chapter VIII—Agriculture—a special subsection explains the loaning operations of the Canadian Farm Loan Board since its inception in 1930. Further progress has been made this year in completing the framework of Chapter XVIII—Transportation and Communications—especially in regard to Part VII that deals with Radio Communications. Chapter XX—Prices—has been revised, especially in relation to Subsection 2 dealing with Retail Prices and Cost of Living, under which heading a new subsection summarizes the latest results of a special study on family living expenditures, now being undertaken by the Bureau as a phase of the Nutrition Survey. The material of Chapter XXVII—Judicial and Penitentiary Statistics—has been recast and certain statistics reclassified in line with the procedure now adopted by the Judicial Statistics Branch of this Bureau.

In commemoration of the Royal Visit to Canada, May 17 to June 15, 1939, colour plates of Their Majesties King George VI and Queen Elizabeth, together with official pictures of incidents connected with the unveiling of the National Memorial and of the Royal Assent to legislation of the 1939 Session of Parliament, appear as frontispiece. At pp. 1155-1160 a short account of the Royal Tour across Canada together with a condensed itinerary is given.

In the absence, during part of the year, of the Editor, S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F. R. Econ. Soc., Chief of the General Statistics Branch and Editor, Canada Year Book, the present volume has been edited under his direction by A. E. Millward, B.A., B.Com., assisted by W. H. Lanceley, and R. F. Clarke, M.C., D.L.S. Charts, graphs, and layouts, except as otherwise credited, have been made by, or under the supervision of, J. W. Delisle, Senior Draughtsman of the Dominion Bureau of Statistics.

Grateful acknowledgments are hereby tendered to the numerous officials of the Dominion and Provincial Governments, and other individuals, who have assisted in the collection of information. Credit is apportioned to the various persons and services concerned by means of footnotes to those chapters and sections that have been contributed, or in the compilation of which co-operation has been received.

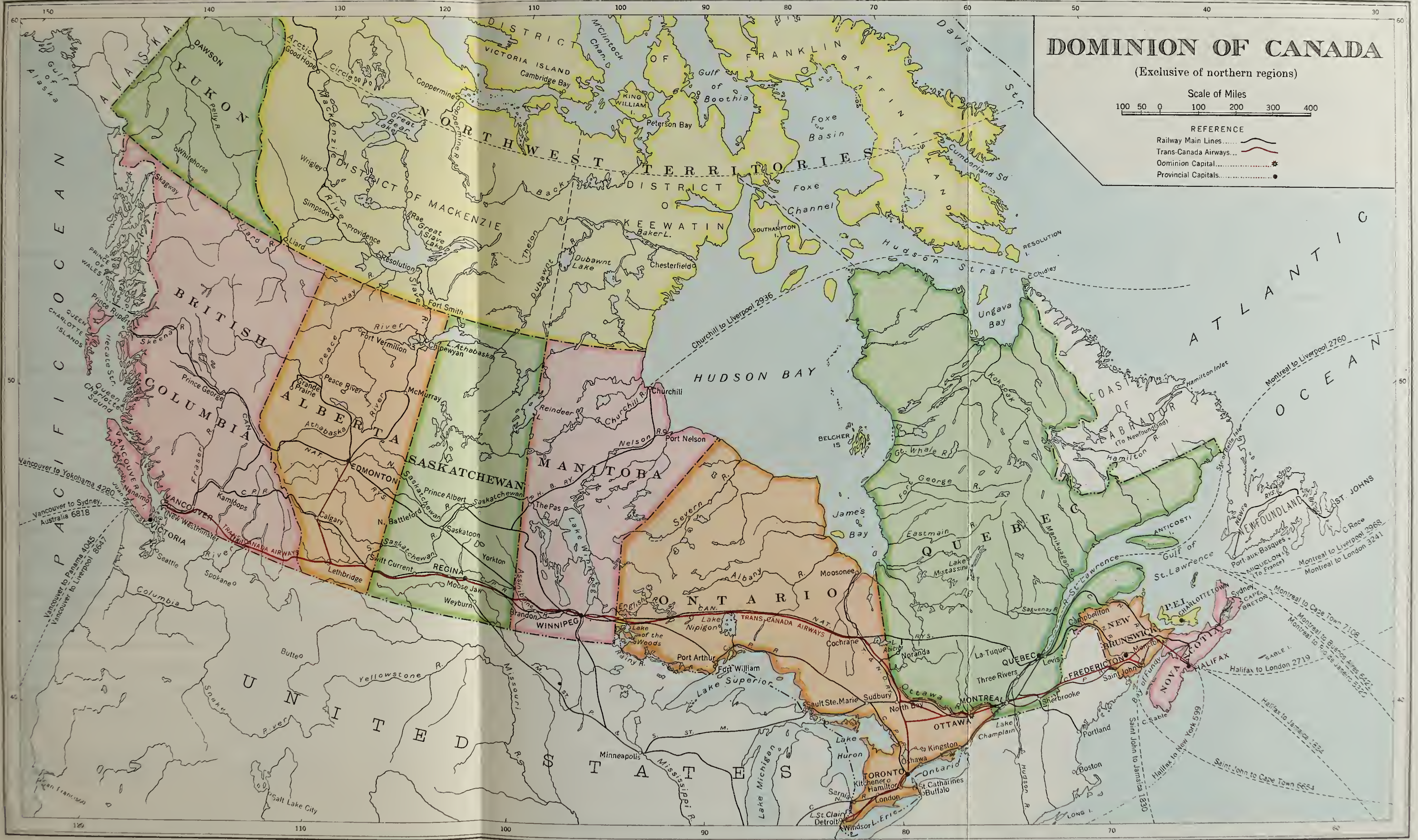
While every care has been taken in preparation, there are doubtless imperfections and, with a view to the improvements of future editions, the Bureau will be glad to hear of any errors that may have escaped notice, and to receive suggestions with regard to omissions or to method of treatment.

R. H. COATS,
Dominion Statistician.

DOMINION BUREAU OF STATISTICS,
OTTAWA, July 1, 1939.

TABLE OF CONTENTS.

CHAPTER.	SUBJECT.	PAGE.
	LIST OF ARTICLES PUBLISHED IN FORMER EDITIONS OF THE YEAR BOOK	vii
	SYNOPSIS	xi
	LIST OF ILLUSTRATIONS, MAPS, AND DIAGRAMS	xxxiii
	STATISTICAL SUMMARY, 1871-1938	xxxv
I	PHYSIOGRAPHY	1
II	HISTORY AND CHRONOLOGY	34
III	CONSTITUTION AND GOVERNMENT	50
IV	POPULATION	78
V	VITAL STATISTICS	114
VI	IMMIGRATION AND COLONIZATION	154
VII	SURVEY OF PRODUCTION	175
VIII	AGRICULTURE	187
IX	FORESTRY	247
X	FUR RESOURCES AND FUR PRODUCTION	287
XI	THE FISHERIES	296
XII	MINES AND MINERALS	309
XIII	WATER POWERS	359
XIV	MANUFACTURES	377
XV	CONSTRUCTION	443
XVI	EXTERNAL TRADE	456
XVII	INTERNAL TRADE	566
XVIII	TRANSPORTATION AND COMMUNICATIONS	626
XIX	LABOUR AND WAGES	774
XX	PRICES	850
XXI	PUBLIC FINANCE	871
XXII	CURRENCY AND BANKING; MISCELLANEOUS COMMERCIAL FINANCE	932
XXIII	INSURANCE	970
XXIV	COMMERCIAL FAILURES	1003
XXV	EDUCATION	1010
XXVI	PUBLIC HEALTH AND RELATED INSTITUTIONS	1027
XXVII	JUDICIAL AND PENITENTIARY STATISTICS	1049
XXVIII	MISCELLANEOUS ADMINISTRATION	1074
XXIX	SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION	1106
XXX	THE ANNUAL REGISTER, 1938-39	1142
	APPENDIX I	1168
	APPENDIX II	1169
	INDEX	1170



DOMINION OF CANADA
(Exclusive of northern regions)
Scale of Miles
100 50 0 100 200 300 400
REFERENCE
Railway Main Lines
Trans-Canada Airways
Dominion Capital
Provincial Capitals
PACIFIC OCEAN
ATLANTIC OCEAN
ALASKA
YUKON
DAWSON
Whitehorse
NORTHWEST TERRITORIES
DISTRICT OF FRANKLIN
DISTRICT OF MACKENZIE
DISTRICT OF KEEWATIN
VICTORIA ISLAND
Cambridge Bay
Coppermine
KING WILLIAM I.
Peterson Bay
Gulf of Boothia
M'Clintock Chan.
BAFFIN ISLAND
Foxe Basin
Foxe Channel
Davis Str.
Cumberland Sd.
SOUTHAMPTON I.
RESOLUTION I.
C. Chidley
Hudson Strait
Arctic Circle
Good Hope
Great Bear Lake
Great Slave Lake
Wrigley
Simpson
Providence
Rae
Resolution
Fort Smith
Liard
Back R.
Thelon R.
Dubawnt R.
Dubawnt Lake
Baker L.
Chesterfield
Skagway
PRINCE OF WALES I.
Gulf of Alaska
QUEEN CHARLOTTE ISLANDS
Hecate Str.
Queen Charlotte Sound
Prince Rupert
Skeena R.
BRITISH COLUMBIA
Prince George
Fraser R.
Kamloops
VANCOUVER I.
Nanaimo
VANCOUVER
New Westminster
VICTORIA
Juan de Fuca
ALBERTA
Peace R.
Fort Vermilion
Chipewyan
L. Athabaska
Grande Prairie
Peace River
McMurray
Athabaska R.
EDMONTON
Calgary
Lethbridge
SASKATCHEWAN
Prince Albert
Battleford
Saskatoon
Yorkton
Swift Current
REGINA
Moose Jaw
Weyburn
MANITOBA
Reindeer L.
Churchill R.
Churchill
Nelson R.
Port Nelson
The Pas
Lake Winnipeg
Brandon
WINNIPEG
HUDSON BAY
Churchill to Liverpool 2936
BELCHER IS.
James Bay
ONTARIO
Severn R.
Albany R.
Moosonee
Cochrane
Lake Nipigon
Port Arthur
Fort William
Lake of the Woods
Rainy R.
Lake Superior
Sault Ste. Marie
Sudbury
North Bay
OTTAWA
Kingston
Oshawa
TORONTO
Kitchener
Hamilton
St. Catharines
Buffalo
London
Sarnia
Windsor
Detroit
L. St. Clair
L. Erie
Lake Huron
Lake Michigan
Lake Ontario
QUEBEC
Ungava Bay
Koksoak R.
Gt. Whale R.
Fort George R.
Eastmain R.
Lake Mistassini
Manikuagan R.
Saguenay R.
La Tuque
Noranda
Abitibi
Three Rivers
QUEBEC
Levis
MONTREAL
Sherbrooke
Ottawa R.
St. Lawrence R.
COAST OF LABRADOR (To Newfoundland)
Hamilton Inlet
Hamilton R.
Strait of Belle Isle
NEWFOUNDLAND
ST. JOHNS
C. Race
Port aux Basques
MIQUELON (To France)
ANTICOSTI
Gulf of St. Lawrence
P.E.I.
CHARLOTTETOWN
NEW BRUNSWICK
Campbellton
FREDERICTON
Saint John
Moncton
Bay of Fundy
NOVA SCOTIA
HALIFAX
Sydney
CAPE BRETON
SABLE I.
C. Sable
Montreal to Liverpool 2760
Montreal to Liverpool 2968
Montreal to London 3241
Montreal to Cape Town 7108
Montreal to Buenos Aires 6424
Montreal to Rio de Janeiro 5310
Halifax to London 2719
Halifax to Jamaica 1834
Halifax to New York 599
Saint John to Jamaica 1830
Saint John to Cape Town 6664
Vancouver to Yokohama 4280
Vancouver to Sydney, Australia 6818
Vancouver to Panama 4045
Vancouver to Liverpool 8647
C.P.R.
CAN. NAT. RYS.
H. B. RY.
TRANS-CANADA AIRWAYS
UNITED STATES
Seattle
Spokane
Columbia R.
Snake River
Butte
Yellowstone R.
Missouri R.
Salt Lake City
San Francisco
Minneapolis
Mississippi R.
Lake Champlain
Hudson R.
Portland
Boston
LONG I.
150
140
130
120
110
100
90
80
70
60
50
40
30

COMPILED AND DRAWN AT THE OFFICE OF THE SURVEYOR GENERAL AND CHIEF HYDROGRAPHIC SERVICE, OTTAWA

ARTICLES AND MISCELLANEOUS TEXT MATERIAL (PUBLISHED IN FORMER EDITIONS) CLASSIFIED BY SUBJECT.

Note.—As explained in the Preface, it is not possible to include in a single edition of the Year Book all articles and descriptive text of previous editions, and the following list has been compiled as an index or key to miscellaneous material and special articles, contributed by authorities in their particular fields, that appear in earlier editions. This list links up the 1939 Year Book with its predecessors in respect to matters that have not been subject to wide change. Those sections of chapters, such as Population, which are automatically revived when new material is made available from a later census, and to which adequate references are made in the text, are not listed unless they are in the nature of special contributions. Only the latest published article on each subject is shown except when an earlier article takes in ground not covered in the later one. When articles cover more than one subject they are listed under each heading.

Article.	Contributor.	Volume.	Page.
Agriculture—			
Geology in Relation to Agriculture	Wyatt Malcolm.	1921	68–72
The Grain Trade	–	1922–23	581–583
The Development of Agriculture in Canada	J. H. Grisadle, D.Sc.A.	1924	186–191
Provincial Departments of Agriculture	–	1930	191–205
The Functions of the Dominion Department of Agriculture	–	1936	212–226
Agricultural Progress and Experimental Farms System	–	1937	221–228
Art and Literature—			
Public Libraries in Canada	–	1921	168–169
Art in Canada	–	1924	886–888
Select Bibliography of the History of Canada	Adam Shortt, C.M.G., LL.D., F.R.S.C.	1925	53–55
The Development of the Fine Arts in Canada	Newton MacTavish, M.A., D. Litt.	1931	995–1009
Bibliography of Canadian Flora	John Adams, M.A. (Cantab.)	1938	56–59
Banking and Finance—			
Life Insurance—An Historical Sketch	A. D. Watson.	1925	860–864
Banking Legislation	–	1931	891–896
The Bank of Canada and its Relation to the Financial System	–	1937	881–885
Historical Sketch of Currency and Banking	–	1938	900–906
Climate and Meteorology—			
Climate and Meteorology	A. J. Connor, M.A.	1913	113–122
General Survey of the Climate of Canada	Sir Frederick Stupart, F.R.S.C.	1914	128–139
The Meteorological Service of Canada	Sir Frederick Stupart, F.R.S.C.	1922–23	43–48
Climate of Canada Since Confederation	Sir Frederick Stupart, F.R.S.C.	1924	31–34
Factors Which Control Canadian Weather	Sir Frederick Stupart, F.R.S.C.	1925	36–40
The Distribution of Precipitation	A. J. Connor, M.A.	1926	42–46
The Climate of Canada	Sir Frederick Stupart, F.R.S.C.	1929	42–51
Temperature and Precipitation in Northern Canada	A. J. Connor, M.A.	1930	41–56
Droughts in Western Canada	A. J. Connor, M.A.	1933	47–59

ARTICLES AND MISCELLANEOUS TEXT MATERIAL, ETC.—continued.

Article.	Contributor.	Volume.	Page.
Constitution and Government—			
Constitution and Government of Canada	Thomas Flint, M.A., LL.B., D.C.L.	1914	1–17
Constitution and Government of Canada	S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R. Econ. Soc.	1922–23	89–100
Provincial and Local Government in—			
Maritime Provinces	Thomas Flint, M.A., LL.B., D.C.L.	1922–23	102–105
Quebec	C. J. Magnan.	1915	8–10
Quebec	G. E. Marquis.	1922–23	105–107
Ontario	S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R. Econ. Soc.	1922–23	107–109
Prairie Provinces	Rev. E. H. Oliver, Ph.D., F.R.S.C.	1922–23	110–113
British Columbia	S. D. Scott.	1915	23–26
British Columbia	John Hosie.	1922–23	113–115
The Government of Canada's Arctic Territory	R. A. Gibson.	1938	92–93
Criminal Law—			
An Historical Sketch of Criminal Law and Procedure	R. E. Watts.	1932	897–899
Education and Scientific Societies—			
Public Libraries in Canada	-	1921	168–169
Royal Canadian Institute	Prof. McMurrich, M.A., Ph.D., LL.D., F.R.S.C.	1924	885
Royal Society of Canada	Prof. McMurrich, M.A., Ph.D., LL.D., F.R.S.C.	1924	884
Honorary Advisory Council for Scientific Research	-	1920	53–57
National Research Council	F. E. Lathe, M.Sc.	1932	867–870
Fauna and Flora—			
Faunas of Canada	P. A. Taverner.	1922–23	32–36
Faunas of Canada	R. M. Anderson, Ph.D.	1937	29–52
Flora of Canada	John Adams, M.A. (Cantab.)	1938	29–58
Forestry—			
A Sketch of the Canadian Lumber Trade	A. R. M. Lower, M.A.	1925	318–323
Fur Trade—			
Historical Sketch	-	1934–35	343–344
Geology—			
Geology and Economic Minerals	R. W. Brock, M.A., LL.D., F.G.S.	1921	65–68
Geology in Relation to Agriculture	Wyatt Malcolm, M.A., F.R.S.C.	1921	68–72
Geological Formation	-	1925	16–24
Geological Survey of Canada	Wyatt Malcolm, M.A., F.R.S.C.	1926	34–36

ARTICLES AND MISCELLANEOUS TEXT MATERIAL, ETC.—continued.

Article.	Contributor.	Volume.	Page.
Geology—concluded.			
Economic Geology of Canada	Wyatt Malcolm, M.A., F.R.S.C.	1929	27–35
(Annual articles reviewing publications in the field of economic geology, 1915-27)			
(Do. 1928-34)	P. J. Moran, B.Sc.	1936	29–37
Geology of Canada	Wyatt Malcolm, M.A., F.R.S.C.	1936	18–28
Geology and Economic Minerals	F. J. Alcock, Ph.D.	1937	16–28
Harbours—			
Administration of Harbours in Canada	-	1930	1013
History—			
The Story of Confederation	Sir Joseph Pope, K.C.M.G., C.V.O., I.S.O.	1918	1–13
Fifty Years of Canadian Progress	E. H. Godfrey, F.S.S.	1918	23–72
History of the Great War	E. A. Cruikshank, LL.D., F.R.S.C.	1919	1–65
Reconstruction in Canada	S. A. Cudmore, B.A. (Tor.), M.A. (Oxon.), F.S.S., F.R. Econ. Soc.	1920	1–64
History of Canada	Arthur Doughty, C.M.G., LL.D.	1922–23	60–80
Select Bibliography of the History of Canada	Adam Shortt, C.M.G., LL.D., F.R.S.C.	1925	53–55
Canada on Vimy Ridge	A. F. Duguid, D.S.O., B.Sc., R.C.A.	1936	50–60
Historic Sites and Monuments	W. D. Cromarty.	1938	78–90
Hospitals and Institutions—			
Historical Review of Hospitals and Other Institutions	J. C. Brady	1936	1006–1009
Labour—			
The Co-operative Movement in Canada	Miss M. Mackintosh, M.A.	1925	704–720
Legislation Respecting Combinations in Restraint of Trade	F. A. McGregor	1927–28	765–770
Wages Statistics of the Census of 1921	Miss M. E. K. Roughsedge.	1927–28	774–783
Occupations of the People	Miss M. E. K. Roughsedge.	1929	134–147
The Occupations of the Canadian People	A. H. LeNeveu, M.A.	1937	128–146
Labour Legislation in Canada	Miss M. Mackintosh, M.A.	1938	787–796
The National Employment Commission	-	1938	778–779
Manufactures—			
The Iron and Steel Industry	-	1922–23	452–456
Miscellaneous Administration—			
Geological Survey of Canada	Wyatt Malcolm, M.A., F.R.S.C.	1926	34–36

ARTICLES AND MISCELLANEOUS TEXT MATERIAL, ETC.—concluded.

Article.	Contributor.	Volume.	Page.
Miscellaneous Administration—concluded.			
(See p. 1105 for references to articles on: the Dominion Observatories; the International Joint Commission; the Geodetic Survey; and the Topographical Survey.)			
Natural Resources—			
Natural Resources of the Dominion.......	Watson Griffith.	1916–17	1–61
Geology and Economic Minerals..........	R. W. Brock, M.A., LL.D., F.G.S.	1921	68–72
A Sketch of the Canadian Lumber Trade..	A. R. M. Lower, M.A.	1925	318–323
Fur Trade—An Historical Sketch........	–	1934–35	343–344
Geology and Economic Minerals..........	F. J. Alcock, Ph.D.	1937	16–28
Population—			
Occupations of the People, 1921...........	Miss M. E. K. Roughsedge.	1929	134–147
Immigration Policy......................	R. J. C. Stead.	1931	189–192
Organization for the Census of 1931.......	–	1932	94–95
Areas and Populations of Countries of the British Empire and of the World, 1921 and 1931..............................	–	1934–35	165–169
Colonization Activities..................	–	1936	201–202
The Occupations of the Canadian People, 1931.................................	A. H. LeNeveu, M.A.	1937	128–146
Radio—			
An Historical Sketch of Radio Communications................................	Commander C. P. Edwards, O.B.E.	1932	607–610
The Canadian Radio Broadcasting Commission................................	Hector Charlesworth	1933	731–733
Research—			
Scientific and Industrial Research in Canada...............................	–	1932	866–872
Seismology—			
Seismology in Canada....................	E. A. Hodgson, Ph. D.	1938	27–30
Time and Time Zones—			
Standard Time and Time Zones in Canada	C. C. Smith.	1934–35	50–53
Times of Sunrise and Sunset.............	–	1938	66–68
Trade—			
Advisory Board on Tariff and Taxation...	–	1930	1018
Harbour Commissions..................	–	1930	1013
The Grain Trade........................	–	1922–23	581–583
Preferential Tariff and Trade Treaties...	W. Gilchrist.	1934–35	520–526
Transportation—			
The Development of Aviation in Canada..	J. A. Wilson.	1938	710–712
The Trans-Canada Airway...............	J. A. Wilson.	1938	713–715
Harbour Commissions..................	–	1930	1013

SYNOPSIS.

CHAPTER I.—PHYSIOGRAPHY.

PAGE.
Part I.—Geographical Features 1–14
1. Land and Fresh-Water Areas of Canada, by Provinces and Territories, 1938 8

Section 1. *Orography* 9–11
2. Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude 9–10

Section 2. *Lakes and Rivers* 12–13
3. Areas, Elevations, and Depths of the Great Lakes 12
4. Drainage Basins in Canada 13

Section 3. *Islands* 13–14

Part II.—Geology 14–25
Section 1. *Geology of Canada* 14–25
Section 2. *Economic Geology* 25

Part III.—Seismology in Canada 25

Part IV.—The Flora of Canada 26

Part V.—Faunas of Canada 26

Part VI.—Lands, Scenic, and Game Resources of Canada 26–32
1. Land Area of Canada, Classified as Agricultural, Forested, or Unproductive 27
2. Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1938 29–31

Part VII.—Climate and Meteorology 32–33

Section 1. *The Climate of Canada* 32
Section 2. *The Factors which Control Canadian Weather* 32
Section 3. *The Distribution of Precipitation in Canada* 32
Section 4. *The Temperature and Precipitation of Northern Canada* 32
Section 5. *The Meteorological Service of Canada* 33
Section 6. *Meteorological Tables* 33
Section 7. *Droughts in Western Canada* 33
Section 8. *Standard Time and Time Zones in Canada* 33

CHAPTER II.—HISTORY AND CHRONOLOGY.

Part I.—History 34–40

Section 1. *The Relationship of the Department of Public Archives to the Historical Records of Canada* 34–36
Section 2. *Outlines of Canadian History* 36
Section 3. *A Bibliography of Canadian History* 36–40

Part II.—Chronology, 1497 to 1939 40–49

CHAPTER III.—CONSTITUTION AND GOVERNMENT.

Part I.—Constitution and General Government 50

Part II.—Provincial and Local Government 50

Part III.—Legislative and Executive Authorities 50–71

Section 1. *Dominion Parliament and Ministry* 50–65
Subsection 1. The Governor General of Canada 51
1. Governors General of Canada, 1867-1939 51

Subsection 2. The Ministry 51–55
2. Ministries since Confederation and Members of the Sixteenth Ministry 52
3. Members of the King's Privy Council for the Dominion of Canada, according to Seniority therein, as at Mar. 1, 1939 53
4. Duration and Sessions of Dominion Parliaments, 1867-1939 54–55

Subsection 3. The Senate 55-58
5. Growth of Representation in the Senate, 1867-1939 57
6. Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1939 57–58

Subsection 4. The House of Commons 58–65
7. Representation in the House of Commons as at Dominion General Elections 1867-1935 59
8. Electoral Districts, Voters on Lists and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935 60–65

Subsection 5. The Dominion Franchise 65
9. Number of Voters and Votes Polled at the General Elections of 1925, 1926, 1930, and 1935 65

Section 2. *Provincial Governments* 66–71
10. Provinces and Territories of Canada, with Present Areas, Dates of Admission to Confederation, and Legislative Process by which Admission was Effected 66
11. Lieutenant-Governors of Provinces, 1867-1938 and Present Ministries 67–71

CHAPTER III.—CONSTITUTION AND GOVERNMENT—concluded. PAGE.

Part IV.—Representatives in Other Countries 72–75

Section 1. *Representatives within the Empire* 72–73

Section 2. *Diplomatic Representation Abroad* 73–75

Section 3. *Diplomatic Representation in Canada* 75

Part V.—Canada and the League of Nations 75–77

CHAPTER IV.—POPULATION.

Section 1. *Census Statistics of General Population* 78–89

1. Population of Canada, by Provinces and Territories, in the Census Years 1871 to 1931 79

2. Percentage Distribution of Canadian Population, by Provinces and Territories, 1871 to 1931 79

3. Population of Canada, by Provinces and Territories, in 1871 and 1931, Numerical Increase in each Decade from 1871 to 1931 and Total Increase 80

4. Population of Canada, by Provinces and Territories, in 1871, and Percentage Increase, by Decades, from 1871 to 1931 80

5. Area and Density of Population of Canada, by Provinces, 1901–31 84

6. Area and Density of Population, by Counties or Census Divisions, 1931 85–86

7. Densities of Population in Various Countries in Recent Years 88

8. Summary of Births, Deaths, Natural Increase, and Immigration, calendar years, with Estimated Population as at June 1, 1921–38 89

Section 2. *Sex Distribution* 89–91

9. Sex Distribution of the People of Canada, by Provinces, 1871-1931 90

10. Masculinity of the Population of Various Countries in Recent Years 91

Section 3. *Conjugal Condition* 91

11. Conjugal Condition of the Population, as Shown by the Censuses of 1871–1931 91

Section 4. *Age Distribution* 92

12. Proportion per 1,000 of the Population by Age Periods, Census Years, 1871–1931 92

13. Proportion per 1,000 of the Population by Age Periods, by Provinces, 1931, with Totals for 1921 92

Section 5. *Racial Origins* 93–94

14. Origins of the People, Census Years, 1871-1931 94

Section 6. *Religions* 94–96

15. Religions of the People at each Decennial Census, 1871-1931 95–96

Section 7. *Birthplaces* 96–97

16. Birthplaces of the Population of Canada, by Numbers and Percentages, According to the Censuses of 1871-1931 96

Section 8. *Citizenship and Naturalization* 97–98

17. Citizenship of Native-Born, other British-Born, and Foreign-Born Residents in Canada in 1931, by Sex, According to Allegiance 97–98

Section 9. *Language Spoken and Mother Tongue* 98–99

18. Percentages of the Population Speaking Both and Neither Official Languages, by Quinquennial Age Groups, Sex, Rural and Urban, Canada, 1931 99

Section 10. *Rural and Urban Population* 99–107

19. Rural and Urban Populations, by Provinces and Territories, Decennial Censuses 1871–1931 and Numerical Increases 1921-31 101

20. Urban Populations, Classified by Size of Municipality Groups, 1911, 1921, and 1931. 102

21. Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931, and the Quinquennial Census of 1936 102–104

22. Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901–31 and the Quinquennial Census of 1936 104–107

Section 11. *Literacy* 107–108

23. Literacy of the Population of 10 Years of Age or Over, by Provinces, 1931 108

Section 12. *School Attendance* 108

Section 13. *Blind and Deaf-Mutes* 108

24. Deaf-Mutes, by Number and Proportion per 10,000 Population, by Provinces, 1881–1931 108

Section 14. *Dwellings and Family Households* 109–110

25. Classification of Urban Households of One Family with Husband and Wife Living Together in Rented Home, by Rent Paid, Earnings, etc., Canada, 1931. 109

26. Numbers of Families and Numbers and Percentages of Children Living at Home, by Class and Size of Family, Rural and Urban, Canada, 1931 109–110

Section 15. *Occupations of the Canadian People* 110

Section 16. *Quinquennial Census of the Prairie Provinces* 110–112

27. Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birthplace, and Sex, as at June 1, 1936 111–112

Section 17. *Annual Estimates of Population* 112–113

28. Estimates of the Population of Canada by Provinces, intercensal years, 1900–38 113

Section 18. *Area and Population of the British Empire* 113

Section 19. *Area and Population of the World* 113

CHAPTER V.—VITAL STATISTICS.

Section 1. *Births* 116–127

1. Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, by Provinces, 1935–37, with Averages for 1921-25, 1926–30, and 1931–35 117–118

2. Live Births in Cities and Towns of 10,000 Population or Over, 1933-37, with Averages, 1926-30, and 1931-35 118–119

CHAPTER V.—VITAL STATISTICS—concluded.

Section 1. *Births*—concluded. PAGE.
3. Percentages of Legitimate Children Born Alive to Canadian-Born, British-Born or Foreign-Born Mothers, by Provinces, 1935-37.............................. 120
4. Live Births and Stillbirths Classified as Single and Multiple, by Sex, 1933-37.... 121
5. Quartile and Decile Ages of Married Fathers and Mothers, in Canada, 1926, 1934-36 122
6. Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers Born in Specified Countries, 1926, 1936 and 1937......... 122–123
7. Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1926, 1936, and 1937................ 124–125
8. Numbers of Illegitimate Births, Classified by Age of Mother, by Provinces, 1937, Percentages to Total Live Births, and Totals of Illegitimate Births, by Sex, 1935, 1936, and 1937, with Averages or Totals, 1926-37.................. 126
9. Stillbirths, Classified by Age of Mother, by Provinces and Legitimacy of Child, 1937, with Averages or Totals, 1926–37, and Ratios to Totals, 1935, 1936, and 1937.. 126
10. Crude Birth Rates of Various Countries of the World and of Provinces of Canada in Recent Years.. 127
Section 2. *Marriages and Divorces*.. 127–131
Subsection 1. Marriages... 127–130
11. Differences in Ages of Bridegrooms and Brides, 1936........................ 128
12. Average Ages of Parties Contracting Marriage, by Provinces, 1935 and 1936..... 128
13. Percentage Distribution by Nativity of Persons Married in Canada, by Provinces, 1935, 1936, and 1937, with Averages for 1921–25, 1926–30, and 1931–35.......... 129
14. Crude Marriage Rates of Various Countries of the World and of Provinces of Canada in Recent Years.. 130
Subsection 2. Divorces.. 130–131
15. Statistics of Divorces Granted in Canada, 1918–38.......................... 131
Section 3. *Deaths*.. 131–149
Subsection 1. General Mortality... 132–140
16. Numerical and Percentage Distribution of Deaths in Canada by Sex and Age Groups, 1936–37.. 133
17. Quartile and Decile Ages of Decedents, by Sex, 1926, 1935, and 1936............ 133
18. Crude and Standardized Death Rates in Canada, by Provinces, 1930–37, with Averages, 1921-25, 1926–30, and 1931-35................................. 135
19. Deaths in Canada, by Principal Causes, 1933–37.............................. 136
20. Death Rates per 100,000 Population in Canada, by Principal Causes, 1933–37..... 138
21. Deaths in Cities and Towns of 10,000 Population and Over, 1933–37, with Averages, 1926–30 and 1931–35.. 139–140
22. Crude Death Rates of Various Countries and of the Provinces of Canada in Recent Years.. 140
Subsection 2. Infantile and Maternal Mortality............................. 141–149
23. Infantile Mortality, by Provinces, together with the Rates per 1,000 Live Births, 1931–37, with Averages for 1921–25, 1926–30, and 1931–35...................... 141
24. Infantile Mortality in Canada, by Principal Causes of Death, 1926, 1936–37...... 142–143
25. Proportion per 1,000 Deaths of Infants under One Year of Age Occurring at each Age Period, 1936–37.. 143–144
26. Deaths and Death Rates of Children Under One Year of Age (Exclusive of Stillbirths) in Cities and Towns of 10,000 or Over, 1935-37, with Averages, 1926–30 and 1931–35... 145
27. Infantile Mortality per 1,000 Live Births in Various Countries of the World and Provinces of Canada in Recent Years.................................... 146
28. Infantile Mortality per 1,000 Live Births in Certain Cities of the World in 1936... 147
29. Maternal Deaths in Canada, by Age Groups, with Rates per 1,000 Live Births, 1934–37, with Averages for 1926-30 and 1931-35.......................... 148
30. Maternal Deaths in each Province, by Age Groups, 1937, with Totals and Rates per 1,000 Live Births for 1934–37 and Averages for 1926–30 and 1931–35........ 148
31. Maternal Deaths in each Province, by Causes of Death, 1937.................... 148–149
Section 4. *Natural Increase*.. 149-153
32. Summary of Births, Marriages, Deaths, and Natural Increase, by Provinces, for the calendar years 1935–37, with Averages 1921–25, 1926–30, and 1931-35...... 151
33. Natural Increase in Cities and Towns of 10,000 Population and Over, 1933–37, and Averages, 1926–30, and 1931–35... 152–153
34. Births, Deaths, and Natural Increase in Canada, by Provinces and for each Sex, 1937, with Totals, 1931-37, and Averages 1926–30, and 1931–35................ 153

CHAPTER VI.—IMMIGRATION AND COLONIZATION.

Section 1. *Statistics of Immigration*..................................... 154–174
1. Numbers of Immigrant Arrivals in Canada, calendar years 1852–1938............ 156
2. Numbers of Immigrant Arrivals in Canada from the United Kingdom, the United States, and other Countries, calendar years 1908–38......................... 157
3. Sex and Conjugal Condition of Immigrants into Canada, by Age Groups, calendar years 1936 and 1937... 157
4. Sex Distribution of Immigrants as Adult Males, Adult Females, and Children, calendar years 1929–37.. 157
5. Racial Origins of Immigrants into Canada, calendar years, 1926–37.............. 158–159
6. The Cumulative Effects of Immigration on the Racial Composition of the Population: Percentages of each Origin Born in Leading Countries and Leading Races with which the Males have Intermarried, 1931....................... 160
7. Languages of Immigrants Ten Years of Age or Over, calendar years 1931-37..... 161
8. Nationalities of Immigrants, calendar years 1931–37.......................... 162
9. Countries of Birth of Immigrants, calendar years 1931–37...................... 163
10. Immigrants Arriving in Canada, by Chief Ports of Arrival, calendar years, 1931–37 164

CHAPTER VI.—IMMIGRATION AND COLONIZATION—concluded.

Section 1. *Statistics of Immigration*—concluded. PAGE.
11. Destinations of Immigrants into Canada, by Provinces, calendar years 1929–38 164
12. Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1937 165–166
13. Rejections of Prospective Immigrants upon Arrival at Ocean Ports, by Principal Causes and by Nationalities, calendar years 1931–37 168
14. Deportations of Immigrants, Including Accompanying Persons, after Admission, by Principal Causes and by Nationalities, fiscal years ended, 1927–38, with Totals 1903–26 and 1903–38 168
15. British Juvenile Immigrants, fiscal years ended 1901–38 169
16. Record of Oriental Immigrants, fiscal years ended 1931–38 and by decades, 1901–30 170
16A. Record of Oriental Immigrants, calendar years, 1929–37 170
17. Record of Revenue Receipts and Registrations for Leave of Chinese Immigrants, fiscal years ended Mar. 31, 1931-38, with Totals 1886-1900, and by decades, 1901–30 171
18. Expenditures on Immigration in the fiscal years ended Mar. 31, 1931–38, with Totals 1868–70, and by decades, 1871–1930 172
19. Canadians Returned from the United States, calendar years 1924–38 173
20. Numbers of Passengers of British Nationality Changing Their Permanent Residence Between the United Kingdom and British North America, calendar years 1924–38 173
21. Returning Canadians and Other Non-Immigrants entering Canada *via* Ocean Ports, by Class of Travel, calendar years 1936 and 1937, with Totals for calendar years 1930–35 174
Section 2. *Colonization Activities* 174

CHAPTER VII.—SURVEY OF PRODUCTION.

Section 1. *The Leading Branches of Production in 1936* 177–180
1. Gross and Net Values of Production in Canada, by Industries, 1935 and 1936 178
2. Itemized Statement of the Net Values of Production in Canada during 1935 and 1936, Indicating the Method of Computation by Giving Separately the Duplicated Items 179
Section 2. *The Provincial Distribution of Production* 180–181
3. Summary Analysis of the Value of Production in Canada, by Provinces, 1935 and 1936 180
Section 3. *Leading Branches of Production in each Province, 1936 compared with 1935* 181–186
4. Gross and Net Values of Production, Classified for each Province, by Industries, 1935 183–184
4A. Gross and Net Values of Production, Classified for each Province, by Industries, 1936 184–185
5. Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1935 185–186
5A. Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1936 186

CHAPTER VIII.—AGRICULTURE.

Section 1. *The Government in Relation to Agriculture* 190–196
Subsection 1. The Dominion Government 191–193
1. Applications for Farm Loans Received, Loans Approved, and Loans Disbursed, fiscal years ended Mar. 31, 1930-38 192
2. Statement of Farm Loans Approved, with Details of Appraised Values of Security at Time of Loan, by Provinces, fiscal years ended Mar. 31, 1937 and 1938 192
Subsection 2. Provincial Departments of Agriculture 193–196
Subsection 3. Provincial Agricultural Colleges and Experimental Stations 196
Section 2. *Statistics of Agriculture* 196–246
Subsection 1. Value of Agricultural Production and of Farm Capital 200–203
1. Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1933–37 200–202
2. Current Value of Farm Capital in Canada, by Provinces, 1936 and 1937 202
Subsection 2. Acreages, Yields ,and Values of Field Crops 203–215
3. Acreages, Yields, and Values of Principal Crops Grown in Canada, 1929–38 203–204
4. Total Acreages and Values of Field Crops in Canada, by Provinces, 1933–38 204
5. Acreages, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938 205–211
6. Annual Average Yields per Acre of Field Crops for Canada, 1931–38, with Long-Time Averages 212
7. Areas and Production of Wheat, Oats, Barley, Rye, and Flaxseed in the Prairie Provinces, 1936-38 212
8. Stocks of Grain on Farms in Canada at July 31, 1938, 1937, and 1936, with Totals of Production of the Previous Years' Crop 213
9. Detailed Stocks of Grain in Canada at July 31, 1936, 1937, and 1938 213
10. Distribution of the Canadian Wheat Crops, by crop years, 1936-37 and 1937-38 214
11. Distribution of the Canadian Oat Crops, by crop years, 1936-37 and 1937-38 214
Subsection 3. Farm Live Stock and Poultry 215–220
12. Summary Statistics of the Numbers of Live Stock and Poultry on Farms in Canada, Censuses of 1871–1931 215
13. Numbers and Values of Farm Live Stock in Canada, by Provinces, 1935–38 215–216
14. Average Values per Head of Farm Live Stock in Canada, by Provinces, 1936–38 217
15. Numbers and Values of Farm Poultry in Canada, by Provinces, 1937 and 1938 217–218
16. Estimated Production, Exports, Imports, and Apparent Consumption of Wool, 1920–38 219
17. Annual Production and Value of Farm Eggs in Canada, by Provinces, 1936–38 220

CHAPTER VIII.—AGRICULTURE—concluded.

PAGE.

- Section 2. *Statistics of Agriculture*—concluded.
  - Subsection 4. Dairying Statistics 220–224
    - **18.** Total Milk Production of Canada, by Provinces, 1936–38 221
    - **19.** Total Value of the Dairy Production of Canada, by Provinces, 1936–38 222
    - **20.** Farm Value of the Milk Production of Canada, by Provinces, 1936–38 222
    - **21.** Production of Butter and Cheese in Canada, by Provinces, 1936–38 223
    - **22.** Production and Value of Miscellaneous Products of Dairy Factories, 1936–38 223
    - **23.** Per Capita Daily Consumption of Milk in Canada, by Provinces, 1936–38 224
  - Subsection 5. Horticulture 224–226
    - **24.** Estimated Quantities and Values of Chief Commercial Fruit Production in Canada, 1934–37, with Five-Year Averages, 1932–36 225
    - **25.** Numbers and Values of Fruit Trees, Bushes, and Plants, Sold by Nurserymen in Canada, years ended May 31, 1935–38 226
    - **26.** Quantities and Values of Floricultural and Ornamental Nursery Stock Grown in Canada and Sold during the years ended May 31, 1937 and 1938 226
  - Subsection 6. Special Agricultural Crops 227–230
    - **27.** Estimated Quantities and Values of Maple Sugar and Maple Syrup Produced in Canada, by Provinces, 1936–38 227
    - **28.** Acreages, Yields, and Values of Sugar Beets Grown in Canada and Quantities of Refined Beetroot Sugar Produced, 1928–37 227
    - **29.** Acreage, Production, and Value of the Commercial Crop of Leaf Tobacco in Canada, representative years, 1900–38 228
    - **30.** Acreage, Production, and Value of the Commercial Crop of Leaf Tobacco in Canada, by Provinces, 1934–38 229
    - **31.** Acreage, Production, and Value of the Commercial Crop of Leaf Tobacco, in Canada, by Main Types, 1937–38, with Five-Year Averages 1932–36 229
    - **32.** Acreages, Yields, and Values of Flaxseed, Fibre, and Tow, in Canada, 1929–38 229
    - **33.** Estimated Production and Value of Honey and Beeswax in Canada, by Provinces, 1936 and 1937 230
  - Subsection 7. Farm Labour and Wages 230–232
    - **34.** Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1936–38 231–232
  - Subsection 8. Prices of Agricultural Produce 232–237
    - **35.** Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis, in store at Fort William and Port Arthur—Aug., 1936-Dec., 1938, and Yearly Average Prices for crop years ended July 31, 1926–38 232–233
    - **36.** Monthly Average Prices of Flour, Bran, and Shorts at Principal Markets, 1938 233
    - **37.** Yearly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1937 and 1938 234
    - **38.** Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1938 234–235
    - **39.** Index Numbers of Producers' Prices of Agricultural Commodities, for Canada, crop years, 1916–17 to 1938–39 236
  - Subsection 9. Agricultural Statistics of the Census 237
    - **40.** Occupations of Part-Time Farm Operators, 1931 237
  - Subsection 10. Miscellaneous Agricultural Statistics 238–239
    - **41.** Major Irrigation Projects in Southern Alberta, 1936 and 1937 238
    - **42.** Average Values per Acre of Occupied Farm Lands in Canada, as Estimated by Crop Correspondents, 1910 and 1920–38 239
  - Subsection 11. International Agricultural Statistics 239–246
    - **43.** Acreages and Yields of Cereals and Potatoes in Countries of the World, 1937 and 1938, with Five-Year Averages for 1932–36 240–244
    - **44.** Exports of Wheat and Flour from the Principal Wheat-Exporting Countries and Imports of Wheat and Flour into the Principal Wheat-Importing Countries, crop years ended July 31, 1937 and 1938 245
    - **45.** Numbers of Live Stock in Principal Countries, *circa* 1936 245–246

CHAPTER IX.—FORESTRY.

- Section 1. *Forest Regions* 247–250
- Section 2. *Important Tree Species* 251
- Section 3. *Forest Resources* 251–253
  - **1.** Estimate of Total Accessible Stand of Timber in Canada, Classified by Type and Merchantable Size, by Provinces and Regions, with Estimate of Grand Total Stand 253
- Section 4. *Noxious Forest Insects and Their Control* 254–263
- Section 5. *Forest Administration* 263–271
  - Subsection 1. Administration of Dominion and Provincial Timber Lands 263–265
  - Subsection 2. Forest Fire Protection 265–267
  - Subsection 3. Scientific Forestry 267–271
- Section 6. *Forest Utilization* 271–286
  - Subsection 1. Woods Operations 271–273
    - **2.** Values of Woods Operations, by Products, 1932–36 272
    - **3.** Quantities of Wood Cut in Operations in the Woods in Canada, Equivalents in Standing Timber, and Total Values, by Chief Products, 1936, with Comparative Totals, 1926–35 272
    - **4.** Equivalent Volumes of Standing Timber Cut in Canada and Values of Products of Woods Operations, by Provinces, 1935 and 1936 273
  - Subsection 2. The Pulp and Paper Industry 273–281
    - **5.** Production, Consumption, Exports, and Imports of Pulpwood, calendar years 1930–37 274
    - **6.** Pulp Production, Mechanical and Chemical, calendar years 1930–37 275

CHAPTER IX.—FORESTRY—concluded.

Section 6. *Forest Utilization*—concluded. PAGE.
Subsection 2. The Pulp and Paper Industry—concluded.
7. Production of Wood-Pulp in Canada, by Chief Producing Provinces, 1933–37..... 277
8. Exports of Wood-Pulp from Principal Wood-Pulp Producing Countries of the World, calendar years 1913, 1936, and 1937.................................. 277
9. Summary of Paper Production in Canada, calendar years 1930–37.............. 278
10. Production of Paper in Canada, by Provinces, 1937........................... 278
11. Estimated Quantities of Newsprint Produced in Leading Countries, 1936 and 1937, and the Ten-Year Average, 1928–37.. 279
12. Exports of Newsprint Paper from Principal Paper-Producing Countries of the World, 1913, 1935, 1936 and 1937... 280
Subsection 3. The Lumber Industry.. 281–283
13. Quantities and Values of Lumber, Shingles, and Lath Produced in Canada, calendar years 1927–37... 282
14. Quantities and Values of Lumber and All Sawmill Products Made in Canada, by Provinces, 1936 and 1937.. 282
15. Canadian Exports of Planks, Boards, and Square Timber, by Countries, calendar years 1935–38... 283
Subsection 4. Manufactures of Wood and Paper.................................... 284
Subsection 5. Forest Depletion and Increment..................................... 284–286

CHAPTER X.—FUR RESOURCES AND FUR PRODUCTION.

Section 1. *The Fur Trade*.. 287–289
Section 2. *Fur Farming*.. 289–292
1. Numbers of Fur Farms, Values of Land and Buildings, and Values of Fur-Bearing Animals, by Provinces, 1934–36....................................... 290
2. Numbers of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928–36.. 290
3. Values of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928–36..... 291
4. Values of Fur-Bearing Animals Sold from Fur Farms in Canada, 1928–36........ 291
5. Values of Pelts Sold from Fur Farms in Canada, 1928–36...................... 292
Section 3. *Statistics of Total Production and Trade in Furs*.................. 292–295
6. Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada with Percentages Sold from Fur Farms, years ended June 30, 1920–37.............. 293
7. Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada, by Provinces, years ended June 30, 1936 and 1937............................. 293
8. Numbers, Total Values, and Average Values of Pelts of Fur-Bearing Animals Taken in Canada, years ended June 30, 1936 and 1937......................... 294
9. Exports of Canadian Raw Furs by Leading Countries and Kinds of Fur, years ended June 30, 1933–37... 295
10. Imports of Raw Furs by Leading Countries Whence Imported and Kinds of Fur, years ended June 30, 1933–37... 295

CHAPTER XI.—THE FISHERIES.

Section 1. *The Early Fisheries*.. 296
Section 2. *The Canadian Fishing Grounds*....................................... 296
Section 3. *The Government and the Fisheries*................................... 296–299
1. Government Bounties Paid to Fishermen for the calendar years 1934–37......... 299
Section 4. *The Modern Fishing Industry*.. 300–308
2. Total Values of the Products of the Fisheries of Canada, calendar years 1870–1937. 301
3. Total Values of the Products of the Fisheries, by Provinces, calendar years 1932–37 301
4. Quantities Caught and Values of All Products Marketed of the Chief Commercial Fishes of Canada, 1933 to 1937... 301–302
5. Percentages of Total Value and Indexes of Volume of Fisheries Production, by Principal Kinds of Sea and Inland Fish, 1926–37............................ 303
6. Numbers of Fish-Canning and -Curing Establishments, by Provinces, 1936 and 1937.. 304
7. Values of Materials Used and of Products of Fish-Canning and -Curing Establishments, 1933–37.. 304
8. Numbers and Capital Values of Fishing Vessels, Boats, Nets, Traps, etc., Used in the Fisheries of Canada, and of Establishments Processing the Products, 1936 and 1937.. 305
9. Numbers of Persons Employed in the Fisheries of Canada and in Processing Establishments Connected Therewith, 1935–37................................ 306
10. Numbers of Employees in Fish-Canning and -Curing Establishments, 1935–37... 306
11. Employees and Salaries and Wages in Fish-Canning and -Curing Establishments, 1920–37... 306
12. Values of Exports and Imports of Fish and Fish Products, fiscal years 1902–38.... 307
13. Exports of the Fisheries, the Produce of Canada, by Principal Countries, calendar years 1936 and 1937... 308

CHAPTER XII.—MINES AND MINERALS.

Section 1. *Mineral Lands Administration and Mining Laws*....................... 311–316
Subsection 1. Dominion Mining Laws and Regulations.............................. 311–312
Subsection 2. Provincial Mining Laws and Regulations............................ 312–316
Section 2. *Summary of General Production*...................................... 316–326
Subsection 1. General Statistics of Mineral Production.......................... 316–322
1. Value of Mineral Production in Canada, calendar years 1886–1938.............. 317
2. Mineral Production of Canada, calendar years 1935–37........................ 319–320
3. Percentages of the Total Value of Mineral Production and Indexes of Volume, by Groups and Principal Minerals, 1929–37.................................. 321–322

CHAPTER XII.—MINES AND MINERALS—concluded.

PAGE.

Section 2. *Summary of General Production*—concluded.
- Subsection 2. Provincial Distribution of Mineral Production 323–326
  - **4.** Mineral Production of Canada, by Provinces, calendar years 1911–38 323
  - **5.** Detailed Mineral Production of Canada, by Provinces, calendar year 1937 324–326

Section 3. *Industrial Statistics of Mines and Minerals—Capital, Labour, Wages, etc., in the Mineral Industry* 327–333
- Subsection 1. Principal Factors in the Mineral Industries 327–329
- Subsection 2. Growth of the Mining Industry in Recent Years 329–331
  - **6.** Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929–37, and by Provinces, 1937 330–331
- Subsection 3. The Principal Mineral Industries 331–333
  - **7.** Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1936 and 1937 332–333

Section 4. *Production of Metallic Minerals* 333–347
- Subsection 1. Cobalt 333–334
  - **8.** Production of Cobalt in Canada, calendar years 1904–38 334
- Subsection 2. Copper 334–335
  - **9.** Quantities of Copper Produced in Canada, by Provinces, with Total Values, calendar years 1911–38 335
  - **10.** Copper Production of the Leading Countries and of the World, 1913–37 335
- Subsection 3. Gold 336–339
  - **11.** Quantities of Gold Produced in Canada, by Provinces, calendar years 1911–38 336–337
  - **12.** Values of Gold Produced in Canada, by Provinces, calendar years 1911–38 337
  - **13.** Quantities and Values of World Production of Gold, 1891–1937 338
  - **14.** Quantities and Values of the World Production of Gold and Silver, by Principal Countries, calendar years 1936 and 1937 339
- Subsection 4. Iron 340–341
  - **15.** Iron Ore Shipments and Production of Pig Iron, Ferro-Alloys, and Steel Ingots and Castings, calendar years 1911–38 340
- Subsection 5. Lead 341–342
  - **16.** Quantities and Values of Lead Produced from Canadian Ores, calendar years 1911–38 341
- Subsection 6. Nickel 342
  - **17.** Quantities and Values of Nickel Produced in Canada, calendar years 1911–38 342
- Subsection 7. Metals of the Platinum Group 343
  - **18.** Quantities and Values of Platinum and Paladium Produced in Canada, 1921–38 343
- Subsection 8. Radium and Uranium 343–344
  - **19.** Production of Radium and Uranium in Canada, 1933–37 344
- Subsection 9. Silver 344–346
  - **20.** Quantities and Values of Silver Produced in Canada, calendar years 1911–38 344
  - **21.** Quantities and Values of Silver Produced in Canada, by Provinces, calendar years 1911–38 345
  - **22.** Quantities and Values of World Production of Silver, with Annual Average Prices, 1860–1937 346
- Subsection 10. Zinc 346–347
  - **23.** Quantities and Values of Zinc Produced in Canada, calendar years 1911–38 347

Section 5. *Production of Non-Metallic Minerals* 347–355
- Subsection 1. Fuels 347–353
  - **24.** Production of Coal in Canada, by Provinces, calendar years 1911–38 348
  - **25.** Imports into Canada of Anthracite, Bituminous, and Lignite Coal for Home Consumption, calendar years 1911–38 349
  - **26.** Exports of Coal, the Produce of Canada, calendar years 1911–38 349
  - **27.** Annual Consumption of Canadian and Imported Coal in Canada, by Quantities and Percentages, calendar years 1911–37 350
  - **28.** Coal Output, Exports, Receipts from Other Countries, and Coal Made Available for Consumption in Canada during 1937 350
  - **29.** Coal Produced in the Principal Countries of the World, 1913, 1921–37 351
  - **30.** Quantities and Values of Natural Gas Produced in Canada, by Provinces, calendar years 1920–38 352
  - **31.** Quantities and Values of Crude Petroleum Produced in Canada, calendar years 1911–38 353
- Subsection 2. Other Non-Metallic Minerals 353–355
  - **32.** Quantities and Values of Asbestos Produced in Canada, calendar years 1911–38 354

Section 6. *Production of Clay Products and Other Structural Materials* 355–357
- **33.** Production, Imports, Exports, and Apparent Consumption of Portland Cement, by Quantities and Values, calendar years 1910–38 356
- **34.** Production of Sand and Gravel, and Stone in Canada, by Principal Purposes, calendar years 1935–37 357

CHAPTER XIII.—WATER POWERS.

Section 1. *The Water Powers of Canada* 359–362
- **1.** Available and Developed Water Power in Canada, by Provinces, Dec. 31, 1938 360
- **2.** Hydraulic Turbine Horse-Power Installed in Canada, by Provinces, as at Dec. 31, 1900–38 361–362
- **3.** Developed Water Power in Canada: Distribution, by Provinces and Industries, and per 1,000 Population, as at Dec. 31, 1938 362

Section 2. *Central Electric Stations* 363–366
- **4.** Summary Statistics of Central Electric Stations, calendar years, 1917–37 364
- **5.** Main-Plant Equipment of Central Electric Stations, by Provinces, and Total Auxiliary Equipment, 1937 365

CHAPTER XIII.—WATER POWERS—concluded.

Section 2. *Central Electric Stations*—concluded. PAGE.
  6. Electric Energy Generated in Central Electric Stations, by Provinces, calendar years 1932–37.... 365
  7. Electric Energy Exported under Authority of the Electricity and Fluid Exportation Act, calendar years 1935–38.... 366
Section 3. *Public Ownership of Hydro-Electric Power*.... 366–376
  Subsection 1. The Hydro-Electric Power Commission of Ontario.... 366–372
  8. Summary Statistics Representative of the Growth of the Ontario Hydro-Electric Power Commission's Undertaking, fiscal years ended Oct. 31, 1910–37.... 368
  9. Distribution of Power to Systems of the Ontario Hydro-Electric Power Commission, fiscal years ended Oct. 31, 1933–37.... 368
  10. Capital Investments in Ontario's Hydro Undertakings, fiscal years ended Oct. 31, 1933–37.... 369
  11. Accumulated Reserves of the Ontario Hydro-Electric Power Commission and of the Local Electric Utilities of the Co-operating Municipalities, fiscal years ended Oct. 31, 1933–37.... 369
  12. Consolidated Statement of Assets, Liabilities, Reserves, and Surpluses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1933–37.... 370–371
  13. Statement of Earnings and Expenses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1933–37.... 371
  14. Statistics Relating to Electrical Service to Rural Power Districts Operated by the Ontario Hydro-Electric Power Commission, years ended Oct. 31, 1933–37. 372
  Subsection 2. Hydro-Electric and Power Commissions in Other Provinces.... 372–376

CHAPTER XIV.—MANUFACTURES.

Section 1. *The Evolution of Canadian Manufacturing Industries*.... 377–389
  Subsection 1. Growth of Manufacturing in Canada since 1870.... 378–386
  1. Historical Summary of Statistics of Manufactures for the Dominion, 1870-1937.. 379
  2. Summary Statistics of Manufactures, by Provinces, for Representative Years 1917–37.... 380–381
  3. Summary Statistics of Manufactures, by Industrial Groups, for Representative Years 1917–37.... 382–383
  4. Summary Statistics of Manufactures for Representative Years 1917–37.... 385
  5. Consumption of Manufactured Products, by Groups, 1936, with Totals for 1922–36. 386
  Subsection 2. Value and Volume of Manufactured Products.... 386–389
  6. Indexes of the Volume of Manufacturing Production, According to Component Material and Purpose Classifications, 1923, 1929, and 1932–36.... 388
  7. Indexes of the Volume of Manufacturing Production for the Groups of the Purpose Classification, 1923, 1929, and 1932–36.... 388
Section 2. *Production of Industrial Groups and Individual Industries*.... 389–409
  8. Percentage Variation in Employment, Salaries and Wages, and Gross Value of Products in the Main Groups of Industries Compared for Specific Years, 1929–36 390
  Subsection 1. Manufactures Grouped by Chief Component Materials.... 390–401
  9. Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel, Materials, and Values of Products of Canadian Manufacturing Industries, 1936. 396–401
  Subsection 2. Manufactures Classified by the Purpose of the Products.... 402–404
  10. Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922–36 and in Detail for 1936.... 402–404
  Subsection 3. Manufactures Classified by Origin of the Materials.... 404–407
  11. Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924–36.... 405–407
  Subsection 4. The Forty Leading Manufacturing Industries.... 407–409
  12. Principal Statistics of the Forty Leading Industries of Canada, Ranked According to Gross Value of the Products, 1936.... 408
  12A. Principal Statistics of the Forty Leading Industries of Canada, Ranked According to Gross Value of the Products, 1937.... 409
Section 3. *Provincial Distribution of Manufacturing Production*.... 410–416
  Subsection 1. The Manufactures of the Maritime Provinces, 1936.... 410–411
  13. Statistics of the Leading Industries of each of the Maritime Provinces, 1936.... 410–411
  Subsection 2. The Manufactures of Quebec, 1936.... 411–412
  14. Statistics of the Leading Industries of the Province of Quebec, 1936.... 412
  Subsection 3. The Manufactures of Ontario, 1936.... 413–414
  15. Statistics of the Leading Industries of the Province of Ontario, 1936.... 414
  Subsection 4. The Manufactures of the Prairie Provinces, 1936.... 414–415
  16. Statistics of the Leading Industries of Manitoba, Saskatchewan, and Alberta, 1936.... 415
  Subsection 5. The Manufactures of British Columbia, 1936.... 416
  17. Statistics of the Leading Industries of British Columbia and Yukon, 1936.... 416
Section 4. *Principal Factors in Manufacturing Production*.... 418–438
  Subsection 1. Capital Employed.... 418–419
  18. Distribution of Capital Employed in the Manufacturing Industries of Canada, in Percentages, by Provinces and Industrial Groups, Representative Years 1917–36.... 418
  19. Forms of Capital Employed in the Manufacturing Industries of Canada, by Provinces and Groups of Industries, 1936 and Totals for Representative Years 1924–36.... 419

CHAPTER XIV.—MANUFACTURES—concluded.

PAGE.

Section 4. *Principal Factors in Manufacturing Production*—concluded.

Subsection 2. Employment in Manufactures.......... 419–426

20. Salaried Employees and Wage-Earners in the Manufacturing Industries of Canada, with Volume of Manufacturing Production and Comparative Efficiency of Production, 1917–36.......... 421

21. Percentages of Male and Female Employees on Salaries and Wages and Percentages of Total Salaries and Wages, by Provinces and Groups of Industries, 1936.. 422

22. Total Numbers of Wage-Earners Employed in the Manufacturing Industries of Canada, by Months and by Sex, for Representative Years 1922–36.......... 423

23. Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1932 to 1935 and in Detail, by Provinces, Groups, and the Forty Leading Industries, 1936.......... 424–425

Subsection 3. Wages and Salaries in Canadian Manufacturing Industries.......... 426–430

24. Employees on Salaries and Wages in Manufacturing Industries, 1936, by Sex, and Average Salaries and Wages, 1935 and 1936, by Provinces and Groups.......... 427

25. Statistics of Salaries and Wages Paid in the Forty Leading Industries, 1936, together with Comparative Figures of Average Salaries and Wages Paid in 1935, and Totals and Averages Paid in Previous Representative Years.......... 428

26. Average Yearly Earnings, and Index Numbers of Earnings, Cost of Living, and Real Wages of Wage-Earners, in Manufacturing Industries, 1917–36.......... 429

27. Percentages of Wages and Salaries Paid to the Total Net Values of Manufacturing Production, 1924–36.......... 430

Subsection 4. Size of Manufacturing Establishments.......... 430–434

28. Manufacturing Establishments Grouped According to Gross Values of Products, with Total and Average Values of Products in each Class, for Canada, 1922, 1929, 1935, and 1936.......... 431

29. Manufacturing Establishments, Grouped According to Gross Values of Products, with Total Values of Products in each Class, by Provinces, 1936.......... 431–432

30. Establishments and Employees in Canadian Manufactures, Grouped According to the Number of Employees per Establishment, 1923, 1929, 1935, and 1936.... 432

31. Establishments and Employees in Canadian Manufactures, by Provinces, and Average Number of Employees per Establishment, 1936.......... 433

32. Size of Establishments of some of the Leading Industries, Grouped According to the Gross Value of Products, and the Number of Persons Employed, 1936.... 434

Subsection 5. Power and Fuel.......... 435–438

33. Totals for Canada of Power Installed in the Manufacturing Industries, 1922–35, with Details by Provinces and Industrial Groups for 1936.......... 435

34. Fuel and Electricity Used in the Manufacturing Industries of Canada, 1922–35, with Details by Provinces and Groups, 1936.......... 437

Section 5. *Manufacturing Industries in Cities and Towns*.......... 438–442

35. Cities and Towns with a Gross Manufacturing Production of over $1,000,000 each, Number of Establishments and Total Gross Production in such Cities and Towns as a Percentage of the Grand Total, by Provinces, 1936.......... 438

36. Principal Statistics of the Manufacturing Industries of the Six Leading Manufacturing Cities of Canada, 1932–36.......... 439

37. Statistics of Manufactures of Municipalities, each with a Gross Production of $1,000,000 or Over, and with Three or More Establishments, 1936.......... 440–442

CHAPTER XV.—CONSTRUCTION.

1. Loans, Units, and Amounts of Loans Approved under the Dominion Housing Act, 1935 and Part I of the National Housing Act, 1938, by Provinces, calendar years 1935–38.......... 444–445

2. Loans made under the Government Home Improvement Plan, by Provinces, 1936–38.......... 446

Section 1. *The Annual Census of Construction*.......... 447–450

3. Principal Statistics of the Construction Industry in Canada, 1935–37.......... 448

4. Principal Statistics of the Construction Industry in Canada, by Provinces, 1937.. 448

5. Percentage Distribution of the Principal Statistics of the Construction Industry, by Provinces, 1937.......... 449

6. Description, Classification, and Value of Construction in Canada, 1937.......... 449

7. Average Monthly Employment of Wage-Earners and their Remuneration, by Groups and Provinces, 1937.......... 450

8. Summary of Average Wage-Earners Employed, Total Wages Paid, and Average Wages per Man, by Provinces, 1937.......... 450

Section 2. *Contracts Awarded and Building Permits*.......... 451–455

9. Summary of the Value of Construction Contracts Awarded in Canada, 1911–38.. 451

10. Construction Contracts Awarded in Canada, by Provinces and Types of Construction, 1933–38.......... 451–452

11. Values of Building Permits Taken Out in 58 Cities, calendar years 1933–38...... 453–454

12. Values of Building Permits Issued by 35 Cities and Index Numbers of the Building Construction Industries, calendar years 1910–38.......... 454–455

CHAPTER XVI.—EXTERNAL TRADE.

Section 1. *The Development of Tariffs*.......... 456–469

Subsection 1. Historical Sketch of External Trade and Tariffs.......... 456–459

Subsection 2. Tariff Relationships with Other Countries.......... 459–469

Section 2. *The Commercial Intelligence Service*.......... 470–472

Canadian Government Trade Commissioners.......... 470–472

Section 3. *Statistics of External Trade*.......... 472–559

I. Exports of Non-Montetary Gold Included in Merchandise Trade Statistics, fiscal years 1934–38.......... 476

CHAPTER XVI.—EXTERNAL TRADE—continued.

PAGE.

Section 3. *Statistics of External Trade*—continued.

Subsection 1. Value and Quantum of World Trade 476–485
- II. Price and Quantum Movements of Groups of Commodities in World Trade, 1929 and 1932–37 478
- III. Percentage Distribution of World Trade by Continents, 1929, 1932, 1936, and 1937 481
- IV. Percentage Distribution of World Trade by Political Groups, 1929, 1932, 1936, and 1937 481
- V. Percentage, Price, and Quantum of Trade of Twenty-Two Leading Countries of the World, calendar years 1929, 1932, 1936, and 1937 484–485

Subsection 2. Historical Statistics of Canadian Trade 485–486

Subsection 3. General Analysis of Current Import and Export Trade 486–488
- VI. Summary of the Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1914, 1927, 1933, 1937, and 1938 487

Subsection 4. Trade with the United Kingdom and the British Empire 488–490
- VII. Canada's Trade with the British Empire 490

Subsection 5. Trade with the United States and Other Foreign Countries 491–492
- VIII. Canada's Trade with the United States and Other Foreign Countries 492

Subsection 6. Geographical Distribution of Canadian Trade by Continents and Countries 493–494
- IX. Canada's Trade by Continents, Representative fiscal years 1929–38 493
- X. Percentages of Total Imports into Canada from Each of Twelve Leading Countries, fiscal years ended Mar. 31, 1935–38 494
- XI. Percentages of Total Domestic Exports from Canada to Each of Twelve Leading Countries, fiscal years ended Mar. 31, 1935–38 494

Subsection 7. Principal Commodities Imported and Exported 495–499
- XII. Canada's Leading Imports, fiscal years 1890, 1900, 1910, 1920, 1930 and 1938 496–497
- XIII. Canada's Leading Domestic Exports, fiscal years 1890, 1900, 1910, 1920, 1930, and 1938 498–499

Subsection 8. Proportions of Trade in Raw and Manufactured Products 499–501
- XIV. Canada's Imports and Exports, by Continents and Leading Countries, According to Degree of Manufacture, year ended Mar. 31, 1938 500–501

Subsection 9. Main Historical Tables and Tables showing Current Trends in External Trade 501–559

1. Aggregate External Merchandise Trade of Canada, fiscal years 1868–1938 502
2. Ratio of Exports to Imports and Values per Capita of Exports, Imports, and Total Trade, fiscal years 1868–1938 503
3. Movement of Coin and Bullion, fiscal years 1868–1938 504
4. Duties Collected on Exports, 1868–92, and on Imports for Home Consumption, 1868–1938, with Percentages of Expense of Collection to Gross Customs Revenue Collected, fiscal years 1868–1938 505
5. Exports to the United Kingdom, to the United States, and to Other Countries, of Merchandise the Produce of Canada, fiscal years 1868–1938 506
6. Imports from the United Kingdom, from the United States, and from Other Countries, of Merchandise Entered for Home Consumption, fiscal years 1868–1938 507
7. Percentage Proportions of Imports from the United Kingdom and the United States, respectively, to Totals of Dutiable and Free, fiscal years 1911–38 508
8. Average *ad valorem* Rates of Duty Collected on Dutiable and Total Imports from the United Kingdom, the United States, and All Countries, fiscal years 1868–1938 508
9. Imports for Home Consumption of Certain Raw Materials Used in Canadian Manufactures, fiscal years 1911–38 509
10. Exports to the United Kingdom, to the United States, and to All Countries, of Classes of Merchandise the Produce of Canada, by Values and Percentages, fiscal years 1935–38 510
11. Imports from the United Kingdom, from the United States, and from All Countries, of Classes of Merchandise Entered for Home Consumption, by Values and Percentages, fiscal years 1935–38 511
12. Principal Exports of Canadian Produce from Canada to United Kingdom, United States, and All Countries, fiscal years 1935–38 512–523
13. Principal Imports into Canada for Consumption from United Kingdom, United States, and All Countries, fiscal years 1935–38 524–543
14. Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1934–38 544–545
15. External Trade of Canada, by Main Groups and Degree of Manufacture, According to Origin, fiscal year ended Mar. 31, 1938 546–547
16. Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1938 548
17. Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at certain Ports and by Provinces, fiscal years ended Mar. 31, 1937 and 1938 549–550
18. Imports of Canada, by Values Entered for Consumption from British Empire and Foreign Countries, Dutiable and Free, under the General, Preferential, and Treaty Rate Tariffs, fiscal year ended Mar. 31, 1938 551
19. Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1934–38 552–553
20. Values of Exports of Canadian Produce, from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1934–38 553–554
21. Values and Percentages of Canadian Imports and Exports, from and to Stated Countries, passing through the United States, fiscal years ended Mar. 31, 1937 and 1938 555

CHAPTER XVI.—EXTERNAL TRADE—concluded.

PAGE.

Section 3. *Statistics of External Trade*—concluded.
  Subsection 10. Comparison of the Volume of Imports and Exports ... 556–559
  22. Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1933–38 ... 557–559
Section 4. *The Tourist Trade of Canada* ... 560–561
  23. Estimated Tourist Expenditures in Canada and of Canadians Abroad, calendar years 1924–38 ... 561
Section 5. *Balance of International Payments* ... 561–565
  XV. Holdings of Gold under Earmark by the Bank of Canada, by Months, 1936–38 ... 563
  24. Summary of Canadian Balance of International Payments, 1934–38 ... 564
  25. Estimated Balance of International Payments, 1936 and 1937 ... 565

CHAPTER XVII.—INTERNAL TRADE.

Section 1. *Interprovincial Trade* ... 566–568
  1. Railway Revenue Freight Traffic Movement in Canada, by Provinces, calendar years 1936 and 1937 ... 567–568
Section 2. *The Grain Trade* ... 568–588
  Subsection 1. Governmental Agencies Regulating or Co-operating with the Grain Trade. 568–588
  2. Production, Imports, Exports, and Home Consumption of Wheat in Relation to Population in Canada, 1868–1937 ... 583
  3. Summary of the Distribution of Canadian Grain, crop year ended July 31, 1938 ... 584–585
  4. Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1937 and 1938 ... 585–586
  5. Quantities of Canadian Grain Inspected, crop years ended July 31, 1935–38 ... 586–587
  6. Shipments of Grain by Vessels from Fort William and Port Arthur, navigation seasons 1937 and 1938 ... 587
  7. Shipments of Grain by Lake and All-Rail Routes from Fort William and Port Arthur, crop years ended July 31, 1937 and 1938 ... 587
  8. Canadian Grain Handled at Eastern Elevators, crop years ended July 31, 1930-38 ... 588
  9. Canadian Grain Handled at Eastern Elevators, by Classes of Ports, crop year ended July 31, 1938 ... 588
Section 3. *Marketing of Live Stock and Live-Stock Products* ... 589–596
  10. Animals in Canada, Animals Killed or Sold by Farmers, and Wool Produced, census years, 1871–1931 ... 589
  11. Index Numbers of Animals on Farms in Canada, calendar years 1921–38 ... 589
  12. Total Receipts of Live Stock and Disposition of Slaughter and Store Stock at Principal Markets in Canada, calendar years 1936 and 1937 ... 590–591
  13. Live Stock from Several Provinces of Canada, Marketed through Stockyards, Packers, etc., calendar year 1937 ... 591
  14. Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards and Packing Plants, calendar year 1937 ... 592–593
  15. Principal Statistics of the Slaughtering and Meat-Packing Industry of Canada, decennially 1870–1930, annually 1933–37 ... 593
  16. Live Stock Slaughtered at Canadian Inspected Establishments, by months, 1936 and 1937 ... 594
  17. Production, Imports, Exports, and Total and Per Capita Consumption of Meats and Live-Stock Products in Canada, calendar years 1934–38 ... 594–595
Section 4. *Cold Storage* ... 596–597
  18. Cold Storage Warehouses in Canada, by Provinces, 1938 ... 596
  19. Stocks of Food Commodities on Hand in Cold Storages and Dairy Factories, by Months, 1937 and 1938 ... 597
Section 5. *Bounties* ... 598
Section 6. *Patents, Copyrights and Trade Marks* ... 598–601
  20. Numbers of Canadian Patentees, by Province of Residence, fiscal years 1927–38 ... 599
  21. Statistics of Patents Applied for, Granted, etc., fiscal years 1933–38 ... 600
  22. Statistics of Copyrights, Trade Marks, etc., fiscal years 1933–38 ... 600
  23. Receipts, Expenditures, and Surpluses on Account of Patents, Copyrights, and Trade Marks, fiscal years 1930–38 ... 601
Section 7. *Weights and Measures* ... 601–602
  24. Inspections by the Weights and Measures Service, fiscal years 1937 and 1938 ... 602
Section 8. *Electricity and Gas Inspection* ... 602–603
  25. Numbers of Electricity Meters in Use, fiscal years 1915–38 ... 603
  26. Numbers of Gas Meters in Use, by Kinds of Gas Consumed, fiscal years 1916–38 ... 603
  27. Quantity of each Kind of Gas Sold in Canada, fiscal years 1920–38 ... 603
Section 9. *Merchandising and Service Establishments* ... 604–621
  Subsection 1. Wholesale and Other Bulk or Non-Retail Merchandising ... 604–608
  28. Bulk Merchandising (Wholesale and Other Non-Retail) in Cities of 20,000 Population or Over, 1930 ... 605
  29. Total Sales and Indexes of Sales made by Wholesalers Proper, by Provinces and Kinds of Business, 1930, 1933, 1936, and 1937 ... 606
  30. Unadjusted Index Numbers of Wholesale Sales, by Economic Divisions and by Kinds of Business, January, 1936, to December, 1938 ... 607–608
  Subsection 2. Retail Trade and Service Establishments ... 608–621
  31. Retail Merchandise Trade in Cities of 20,000 Population or Over, 1930 ... 609
  32. Total Sales and Indexes of Sales of Retail Merchandise Trade, by Provinces and Kinds of Business, 1930, 1933–37 ... 610–613
  33. Numbers of Chains and Chain Stores in Selected Kinds of Business, 1923, 1930, 1936, and 1937 ... 614
  34. Principal Statistics for Chain Stores, 1930–37 ... 614

CHAPTER XVII.—INTERNAL TRADE—concluded.

Section 9. *Merchandising and Service Establishments*—concluded. PAGE.
- **35.** Retail Sales of New Motor Vehicles in Canada, calendar years 1932-38, with Total Value for 1930 615
- **36.** Numbers and Values of New and Used Motor Vehicles Sold in Canada, by Provinces, 1937 616
- **37.** Comparison of Sales and Financing of New Motor Vehicles in Canada, 1932-38 617
- **38.** Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by months, 1929, 1930, 1933, and 1935-38 618
- **39.** Adjusted Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Kinds of Business, January, 1936, to December, 1938 619
- **40.** Motion Picture Theatres, Employees, Salaries and Wages, and Total Receipts, by Provinces, 1930, 1936, and 1937 620
- **41.** Principal Statistics for Motion Picture Theatres, by Provinces and Cities, 1936 and 1937 621

Section 10. *Control and Sale of Alcoholic Liquors and Beverages in Canada* 622-625
- **42.** Gross Sales and Net Profits of Liquor Control Boards, Additional Revenues Paid Directly to Governments, and Total Net Revenue from Liquor Control, 1935-37 624
- **43.** Apparent Consumption of Spirits in Canada, fiscal years ended Mar. 31, 1923-38 625
- **44.** Apparent Consumption of Malt Liquors, fiscal years ended Mar. 31, 1923-38 625
- **45.** Apparent Consumption of Wines in Canada, fiscal years ended Mar. 31, 1923-38 625

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS.

Part I.—Governmental Control Over Agencies of Transportation and Communication 627-629

Part II.—Railways 629-660

Section 1. *Steam Railways* 630-655

Subsection 1. Mileage and Equipment 632-634
- **1.** Record of Steam Railway Mileage, 1835-1937 633
- **2.** Operated Steam Railway Mileage, by Provinces, as at Dec. 31, 1929-37 633
- **3.** Rolling-Stock of Steam Railways, as at Dec. 31, 1931-37 634

Subsection 2. Finances of Steam Railways 635-649
- **4.** Capital Liability of Steam Railways, 1901-37 635
- **5.** Mileage, Capital Liability, Earnings, and Operating Expenses of Individual Steam Railways, calendar year 1937 636
- **6.** Capital Invested in Road and Equipment of Canadian Steam Railways, calendar years 1932-37 637
- **7.** Earnings and Operating Expenses of Steam Railways per Mile of Line and per Train Mile, 1915-37 637
- **8.** Distribution of Operating Expenses of Steam Railways, calendar years 1934-37 638
- **9.** Steam Railway Employees, Totals and Averages of Salaries and Wages, and Ratio of Salaries and Wages to Operating Revenues and Expenses, 1912-37 638
- **10.** Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1937, by Type of Grant 639
- **11.** Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1937, by Railways 639
- **12.** Cash Subsidies Granted to Railways to Dec. 31, 1937, by Railways 640
- **13.** Railway Bonds Guaranteed by Dominion and Provincial Governments, as at Dec. 31, 1937 640
- **14.** Railway Investment Account of the Dominion Government to Mar. 31, 1938 641-642
- **15.** Gross Revenues, Operating Expenses, Net Revenues, Fixed Charges, and Deficits of the Canadian National Railways, calendar years 1923-37 643
- **16.** Condensed Consolidated Balance Sheet at Dec. 31, 1936, showing adjustments as of Jan. 1, 1937, as Authorized by the Canadian National Railways Capital Revision Act, 1937 644-645
- **17.** Capital Structure and Debt of the Canadian National Railways, as at Dec. 31, 1922-37 646
- **18.** Funds Received and Expended by Canadian National Railways, calendar years 1923-37 647-648
- **19.** Reconciliation between Public Accounts, Mar. 31, 1938, and Canadian National Railways' Balance Sheet, Dec. 31, 1937, with respect to the Railways' Obligations to the Dominion Government 648
- **20.** Assets of the Canadian National Railways System, as at Dec. 31, 1922 and 1937 649

Subsection 3. Steam Railway Traffic 649-655
- **21.** Summary Analysis of Statistics of Passenger and Freight Services and Receipts, calendar years 1929-37 650
- **22.** Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, calendar years 1936 and 1937 651-652
- **23.** Commodities Hauled as Freight on Steam Railways, calendar years 1933-37 652-653
- **24.** Numbers of Passengers, Employees, and Others Killed or Injured on Steam Railways, calendar years 1929-37 654
- **25.** Numbers of Persons Killed or Injured on Steam Railways, calendar years 1935-37 654-655

Section 2. *Electric Railways* 655-658

Subsection 1. Equipment of Electric Railways 656
- **26.** Mileage and Equipment of Electric Railways, calendar years 1934-37 656

Subsection 2. Finances of Electric Railways 656-657
- **27.** Financial Statistics of Electric Railways, calendar years 1929-37 656
- **28.** Mileage, Capital, Earnings, Operating Expenses, Passengers, Employees, and Salaries and Wages of Electric Railways in Canada, calendar year 1937 657

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS—continued.

Part II.—Railways—concluded. PAGE.
Section 2. *Electric Railways*—concluded.
Subsection 3. Traffic of Electric Railways.......... 657-658
29. Summary Statistics of Electric Railway Operation, calendar years 1929-37...... 658
30. Numbers of Passengers, Employees, and Others Killed or Injured on Electric Railways, calendar years 1929-37, with Totals from 1894 to June 30, 1929..... 658

Section 3. *Express Companies*.......... 658-660
31. Summary Statistics of Revenues and Expenses of Express Companies, calendar years 1929-37.......... 659
32. Revenues, Expenses, and Operating Mileage of Express Companies, by Companies, calendar years 1936 and 1937.......... 659
33. Business Transacted by Express Companies in Financial Paper, calendar years 1933-37.......... 660

Part III.—Road Transportation.......... 660-672

Section 1. *Provincial Motor Vehicle and Traffic Regulations*.......... 660-662

Section 2. *Roads and Vehicles*.......... 662-664

Subsection 1. Roads and Highways.......... 662-663
1. Classification of Highway Mileage, by Provinces, 1937.......... 663

Subsection 2. Motor Vehicles.......... 663-664

2. Numbers of Motor Vehicles Registered in Canada, by Provinces, calendar years 1929-37.......... 663
3. Types of Motor Vehicles Registered in Canada, by Provinces, calendar years 1936 and 1937.......... 664
4. Apparent Consumption of Automobiles in Canada, 1926-37.......... 664

Section 3. *Finances of Road Transportation*.......... 665-669
5. Summary of Highway Expenditures in Canada, 1919-37.......... 666
6. Capital, Maintenance, and General Expenditures on Provincial Highways or Provincially Subsidized Highways in Canada, calendar years 1933-37.......... 667
7. Provincial Government Funded Highway Debt and Annual Charges Thereon, 1935-37.......... 668
8. Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, calendar years 1936 and 1937.......... 669

Section 4. *Road Traffic*.......... 669-672
9. Sales of Gasoline in Canada, by Provinces, calendar years 1933-37.......... 670
10. Deaths Resulting from Motor Vehicle Accidents in Canada, by Provinces, calendar years 1926-37.......... 671
11. Persons Killed or Injured in Motor Vehicle Accidents, as Reported by Provincial Motor Vehicle Authorities, showing Status of Person, 1937.......... 672

Part IV.—Waterways.......... 672-701

Section 1. *Equipment and Facilities*.......... 673-682

Subsection 1. Shipping.......... 673-674
1. Numbers and Net Tonnages of Vessels on the Registry of Shipping of Canada, by Provinces, as at Dec. 31, 1928-37.......... 674
2. Vessels Built and Registered in Canada and Vessels Sold to Other Countries, fiscal years 1927-38.......... 674

Subsection 2. Aids to Navigation and Miscellaneous Works.......... 675-676
3. Marine Danger Signals Maintained in Canada, fiscal years 1927-38.......... 675
4. Duration of the Season of Open Navigation in the St. Lawrence Ship Channel, calendar years 1911-38.......... 676

Subsection 3. Canals.......... 676-677
5. Canals of Canada under the Control of the Department of Transport, Length and Lock Dimensions, 1939.......... 677

Subsection 4. Harbours.......... 677-679
6. Dimensions of Graving Docks Owned by the Dominion Government.......... 679
7. Dimensions and Cost of Graving Docks Subsidized under the Dry Dock Subsidies Act, 1910.......... 679

Subsection 5. Government Administrative Services.......... 680-682
8. Details of Pilotage, by Districts, fiscal years 1937 and 1938.......... 680
9. Steamboat Inspection, by Inspection Divisions, fiscal years 1937 and 1938.......... 681
10. Seamen Shipped and Discharged at Canadian Ports, calendar years 1918-37.......... 682
11. Canadian Wrecks and Casualties, calendar years 1918-37.......... 682

Section 2. *Financial Statistics of Waterways*.......... 682-689

Subsection 1. Capital and Operation Expenditures of Waterways.......... 683-688
12. Capital Expenditures of the Dominion Government on Waterways and Harbours, to Mar. 31, 1938.......... 684
13. Expenditures of the Dominion Government for Maintenance and Operation of Aids to Navigation, Canals, and Harbours, fiscal years 1935-38.......... 685-686
14. Revenues of the Dominion Government from the Operation of Aids to Navigation, Canals, and Harbours, fiscal years 1935-38.......... 686
15. Operating Revenues and Expenditures of Harbours and Elevators under the National Harbours Board and the New Westminster Harbour Commission, calendar years 1936-38.......... 687
16. Mail Subsidies and Steamship Subventions, fiscal years 1936-38.......... 687-688

Subsection 2. Merchant Marine Services Operated by the Canadian Government.......... 688-689

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS—continued.

PAGE.

Part IV.—Waterways—concluded.

Section 3. *Water Traffic and Services* 689–701
Subsection 1. Shipping 689–694
17. Sea-Going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, fiscal years 1926–38 690
18. Numbers and Tonnages of Sea-Going Vessels Entered and Cleared and of All Vessels (Exclusive of Ferriage) Entered at each Principal Canadian Port, fiscal year 1938 692–693
19. Numbers and Tonnages of All Vessels (Exclusive of Ferriage) Entered and Cleared at Canadian Ports, 1929–38, with Details by Provinces for the fiscal year 1938 694
Subsection 2. Canal Traffic 695–699
20. Traffic through Canadian Canals, by Nationality of Vessels and Origin of Freight, navigation seasons 1929–38 695
21. Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1937 and 1938 695–696
22. Principal Commodities Carried through Canadian Canals, navigation seasons 1935–38 696
23. Canal Traffic, by Direction and Origin, navigation seasons 1937 and 1938 697
24. Freight Traffic Using the St. Lawrence River, Welland Ship, and Sault Ste. Marie Canals, navigation season 1938 698
25. Traffic to and from the East and West Coasts of Canada *via* the Panama Canal, years ended June 30, 1929–38 699
26. Summary of Commercial Traffic through the Panama Canal, years ended June 30, 1929–38 699
Subsection 3. Harbour Traffic 699–701
27. Principal Commodities in Water-Borne Cargo Landed from and Loaded to Vessels at Six Principal Ports in Canada during the calendar year 1938, with Grand Totals, 1934–38 700–701

Part V.—Air Navigation 702–713
1. Summary Statistics of Civil Aviation in Canada, calendar years 1932–37 702–703
Section 1. *History and Administration* 703–708
Subsection 1. Development of Aviation in Canada 703–707
Subsection 2. Administration 707–708
Section 2. *Airports and Aircraft* 708–710
Subsection 1. Ground Facilities 708–709
2. Air Harbours in Canada, 1937 708–709
Subsection 2. Aircraft 709–710
3. Licensed Civil Aircraft in Canada, as at Dec. 31, 1937 710
Section 3. *Finances and Employees* 710–711
4. Investment of Provincial Governments, Flying Clubs, and Commercial Organizations for Civil Aviation in Canada, 1937 710
5. Revenues and Expenditures of Provincial Governments, Flying Clubs, and Commercial Organizations for Civil Aviation in Canada, 1937 711
6. Employees and Salaries and Wages in Civil Aviation in Canada, 1937 711
Section 4. *Traffic* 711–713
7. Commercial Air Traffic in Canada, by Provinces, 1937 711
8. Operations of Civil Aircraft in Canada, 1937, with totals for 1936 712
9. Accidents Resulting from Aircraft in Flight in Canada, 1937 713
10. Non-Flight Accidents in Connection with Civil Aviation in Canada, 1937 713
11. Operation and Accident Averages in Commercial Aviation in Canada, 1937 713

Part VI.—Wire Communications 714–718
Section 1. *Telegraphs* 714–715
1. Summary Statistics of all Canadian Telegraphs, calendar years 1929–37 714
2. Statistics of Chartered Telegraph Companies, calendar years 1933–37 715
Section 2. *Telephones* 716–718
Subsection 1. Systems and Equipment 716–717
3. Mileages of Pole Line and Wire and Telephones in Use, Classified by Business, Residential, Rural and Public Pay, as at Dec. 31, 1926–37 716
4. Telephones in Use, by Provinces, as at Dec. 31, 1937 717
Subsection 2. Telephone Finances 717–718
5. Summary Financial Statistics of Telephones in Canada, calendar years 1920–37 717
6. Financial Statistics of Telephones in Canada, by Provinces, 1937 718
Subsection 3. Telephone Calls 718
7. Local and Long-Distance Calls and Averages per Telephone and per Capita, calendar years 1928–37 718

Part VII.—Radio Communications 718–729
Section 1. *Administration* 719–721
Subsection 1. Technical Control and Licensing 719–720
1. Summary of Radio Stations in Operation in Canada, by Class, as at Mar. 31, 1934–38 720
2. Private Receiving Station Licences Issued in Canada, by Provinces, fiscal years 1935–38 720
Subsection 2. Investigation and Suppression of Inductive Interference 721
3. Investigations of Inductive Interference, fiscal years 1935–38 721
Section 2. *Operation of Radio Communications* 721–725
Subsection 1. Dominion Government Radio Stations 721–724
4. Type of Service Performed and Areas Served by Marine Radio Stations of the Department of Transport, as at Mar. 31, 1938 722–723
5. Type of Service Performed and Routes Served by Aeronautical Radio Stations of the Department of Transport, as at Mar. 31, 1938 723

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS—concluded.

Part VII.—Radio Communications—concluded. Page.
Section 2. *Operation of Radio Communications*—concluded.
Subsection 2. Provincial Government Radio Stations 724
Subsection 3. Privately-Owned Commercial Stations 724–725
Section 3. *Program Broadcasting and Regulation under the Canadian Broadcasting Corporation.* 725–729
Subsection 1. Policy and Administration 725–726
Subsection 2. Broadcasting Facilities 726–727
6. Broadcasting Stations of the CBC National Network, showing Time Zones, Identification Letters, Locations and Frequencies, as at Mar. 31, 1939 727
Subsection 3. Finances 727
7. Income and Expenditure of the Canadian Broadcasting Corporation, fiscal year 1938 727
Subsection 4. Programs 728–729
8. Classification of CBC Programs, showing Percentage Distribution, fiscal year 1938 729

Part VIII.—The Post Office 730–736
1. Numbers of Post Offices in Operation, by Provinces, as at Mar. 31, 1933–38 731
2. Statistics of Gross Postal Revenues of Offices Collecting $10,000 and upwards, fiscal years 1937 and 1938 731–733
3. Revenues and Expenditures of the Post Office Department, quenquennial fiscal years 1890–1910, and each fiscal year 1911–38 734
4. Operations of the Money Order System in Canada, fiscal years 1911–38 734
5. Money Order Statistics, by Provinces, and Total Postal Notes, fiscal years 1934-38. 734–735
6. Mileage Flown and Weight of Mail Carried by Air, fiscal year 1938 736

Part IX.—The Press 737–773
Section 1. *The Development of the Press in Canada* 737–758
Section 2. *Statistics of the Press* 758–773
1. Daily Newspapers of Canada: Places where Published, Circulations, Years Established, and Political Affiliations, by Provinces 759–760
2. Principal Weekly and Semi-Weekly Newspapers of Canada: Places Where Published, Circulations, Years Established, and Political Affiliations, by Provinces 761–764
3. Leading Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established 765–770
4. Publications in Canada, by Frequency of Issue, 1921–38 771
5. Circulations of Daily, Semi-Weekly, and Weekly Publications in Canada, 1921–38, with Details by Provinces, 1938 771
6. Circulations of Daily, Semi-Weekly, and Weekly Publications, in Cities of 20,000 Population or Over, 1937 772
7. Numbers and Circulations of French Language Publications in Canada, by Provinces, 1936 and 1937 773

CHAPTER XIX.—LABOUR AND WAGES.

Part I.—Labour 774–840
Section 1. *Occupations of the Wage-Earning Population* 774–778
Subsection 1. Occupational Trends in Canada, 1891–1931 774–778
1. Numbers and Percentages of the Gainfully Occupied, 10 Years of Age or Over, Classified According to Sex, in each Occupational Group, by Economic Areas, 1891–1931 776–778
Section 2. *The Dominion Department of Labour* 779–782
Section 3. *Provincial Labour Departments and Bureaus* 782–786
Section 4. *Canada and the International Labour Organization* 786–788
Section 5. *Organized Labour in Canada* 788–792
2. Membership of Trade Unions in Canada, 1911–37 788
3. International Trade Unions Operating in Canada, showing Individual Numbers of Branches and Memberships, as at Dec. 31, 1937 790–791
4. Canadian Central Labour Bodies Operating in Canada, showing Individual Numbers of Branches and Memberships, as at Dec. 31, 1937 791–792
Section 6. *Fatal Industrial Accidents* 792–793
5. Fatal Industrial Accidents in Canada, by Industries, 1934–38 792
Section 7. *Workmen's Compensation in Canada* 793–797
6. Compensation and Medical Aid Paid, and Accidents Compensated by the Nova Scotia Workmen's Compensation Board, 1930–38 793
7. Compensation, Funeral Expenses, and Medical Aid Paid, and Reserves Held by the New Brunswick Workmen's Compensation Board, 1930–38 794
8. Compensation Paid and Accidents Compensated by the Quebec Workmen's Compensation Commission, 1928–38 794
9. Compensation and Medical Aid Paid, and Accidents Reported by the Ontario Workmen's Compensation Board, 1930–38 795
10. Compensation and Medical Aid Paid, and Accidents Compensated by the Manitoba Workmen's Compensation Board, 1930–37 796
11. Compensation and Medical Aid Paid and Accidents Compensated by the Saskatchewan Workmen's Compensation Board 1930–38 796
12. Compensation and Medical Aid Paid, and Accidents Reported and Compensated by the Alberta Workmen's Compensation Board, 1930–38 797
13. Compensation and Medical Aid Paid, and Accidents Compensated by the British Columbia Workmen's Compensation Board, 1930–37 797
Section 8. *Strikes and Lockouts* 798–800
14. Strikes and Lockouts in the Coal Mining, Other, and All Industries in Canada, 1930–38, with Totals for 1901–29 798

CHAPTER XIX.—LABOUR AND WAGES—concluded.

Part I.—Labour—concluded.

Section 8. *Strikes and Lockouts*—concluded. PAGE.

15. Strikes and Lockouts, showing Numbers of Workers Involved and Time Loss, by Provinces, 1937 and 1938 799
16. Strikes and Lockouts, by Industries, 1937 and 1938 800
Section 9. *Employment and Unemployment* 800–821
Subsection 1. Operations of the Employment Service of Canada 800–802
17. Applications for Employment, Positions Offered, and Placements Effected by the Employment Service of Canada, 1930–38 and by Provinces, 1937 and 1938 802
Subsection 2. Unemployment as Reported by Trade Unions 802–803
18. Percentages of Unemployment in Trade Unions, by Provinces, half-yearly, 1930–37, and by months, 1938 803
Subsection 3. Employment as Reported by Employers 803–809
19. Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927 805–806
20. Index Numbers of Employment as Reported by Employers in Leading Cities, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927 807
21. Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927 808–809
Subsection 4. Employment and Unemployment Statistics of the Census 809–812
22. Estimated Wage-Earners and Numbers and Proportions Actually Employed, calendar years 1921–38, and by months 1937 and 1938 812
Subsection 5. Unemployment Relief 812–819
23. Settler Families and Individuals Approved and Settled under the Relief Settlement Agreements to Dec. 31, 1938 818
24. Disbursements by the Dominion for Assistance Provided Under Relief Legislation, 1930–38 819
Subsection 6. National Registration of Persons on Material Aid 819–821
25. Persons on Urban and Agricultural Aid, by Months, 1937–38 821
26. Fully-Employable Persons on Urban Aid, by Months and Sex, 1937–38 821
Section 10. *Old Age Pensions and Pensions for Blind Persons* 821–824
27. Financial Summary of Old Age Pensions in Canada, by Provinces, as at Dec. 31, 1938 823
28. Financial Summary of Pensions for Blind Persons in Canada, by Provinces, as at Dec. 31, 1938 824
Section 11. *The Co-operative Movement in Canada* 824–829
Subsection 1. Consumers' Co-operation 825
29. Statistics of Retail Co-operative Societies, Affiliated with the Co-operative Union of Canada, 1931–37 825
Subsection 2. Co-Operative Credit in Quebec 826
30. Progress of Co-operative People's Banks in Quebec, 1915, 1920, 1925 and 1930–37 ... 826
Subsection 3. Agricultural Co-operation in Canada in 1937 826–829
31. Farmers' Co-operative Business Organizations in Canada, crop year ended July 31, 1938 829
Section 12. *Labour Legislation in Canada in 1938* 830–834
Section 13. *Legislation Respecting Combinations in Restraint of Trade* 834–835
Section 14. *Mothers' Allowances* 835–840
32. Mothers' Allowances in Nova Scotia, fiscal years 1931–38 837
33. Mothers' Allowances in Ontario, fiscal years 1921–38 838
34. Mothers' Allowances in Manitoba, 1919–38 838
35. Mothers' Allowances in Saskatchewan, fiscal years ended Apr. 30, 1929–38 839
36. Mothers' Allowances in Alberta, 1919–38 839
37. Mothers' Allowances in British Columbia, fiscal years 1921–38 840

Part II.—Wages 840–849
Section 1. *Wage Rates* 840–842
1. Index Numbers of Rates of Wages for Various Classes of Labour in Canada, 1913–38 841
2. Rates of Wages and Hours of Labour in Various Trades and for Unskilled Factory Labour in Certain Cities of Canada, 1938 842
Section 2. *Wages and Hours of Labour Under Provincial Minimum Wage Legislation* 842–849
Subsection 1. Minimum Wages for Females 843–846
3. Minimum Wage Rates for Female Workers in Canada Under Orders of Provincial Minimum Wage Boards, as at Dec. 31, 1938 844–845
Subsection 2. Minimum Wages for Male Employees 846–847
Subsection 3. Wages and Hours of Labour under Collective Agreements and Schedules of Wages and Hours Made Obligatory by Order in Council in Certain Provinces. 848–849
Section 3. *Cost of Living of Wage-Earners* 849
Section 4. *Earnings in the Census Year, 1931* 849

CHAPTER XX.—PRICES.

Section 1. *Wholesale Prices of Commodities* 850–859
Subsection 1. Historical Review of Canadian Prices 850–851
1. Annual Index Numbers of Wholesale Prices in Canada, 1867–1938 851
Subsection 2. The Index Number on a Post-War Base (1926) 851–859
2. Weighted General Wholesale Price Index Numbers, by Months, 1928–38 852
3. Monthly Price Index Numbers of Industrial Materials, 1926–38 854
4. Annual Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), by Groups (Chief Component Material Classification), 1918–38, with Monthly Figures for 1937 and 1938 855
5. Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Purpose, Yearly Averages, 1926–38, and by Months, October, 1937 to December, 1938 856

CHAPTER XX.—PRICES—concluded.

Section 1. *Wholesale Prices of Commodities*—concluded.

Subsection 2. The Index Number on a Post-War Base—concluded.

Page.
6. Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Yearly Averages 1932–38 856–857
7. Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933, 1937, and 1938 857–858
8. Index Numbers of Wholesale Prices of Principal Exports and Imports, 1926-38 859
Section 2. *Retail Prices and Cost of Living* 860–866
Subsection 1. The Bureau of Statistics Index Numbers of Retail Prices and Services 860–862
9. Index Numbers of Retail Prices, Rents, and Costs of Services (on the 1926 Base), 1926–38 and by Months, 1937–38, and January–April, 1939 860–861
10. Average Daily Hospital Charges in Canada and Index Numbers Thereof (on the 1913 Base), 1913 and 1930–37 862
Subsection 2. The Nutrition and Family Living Expenditures Investigation 862–865
11. Average Distribution of Family Expenditures, by Income Groups 865
Subsection 3. Cost of Living of Wage-Earners 866
12. Changes in the Cost of Living of Wage-Earners in Canada, 1929–38 866
Section 3. *Index Numbers of Security Prices* 867–869
13. Investors Index Numbers of Common Stocks (on the 1926 Base), by Months, 1938 868
14. Index Numbers of 25 Preferred Stocks, by Months, January, 1927, to April, 1939 869
15. Weighted Index Numbers of Prices of Mining Stocks (on the 1926 Base), by Months, 1937, to May, 1939 869
Section 4. *Index Numbers of Bond Yields* 870
16. Index Numbers of Dominion of Canada Long-Term Bond Yields (on the 1926, Base), by Months, 1929 to May, 1939 870

CHAPTER XXI.—PUBLIC FINANCE.

Section 1. *Dominion Public Finance* 873–906
Subsection 1. The Current Balance Sheet of the Dominion 875–876
1. Balance Sheets of the Dominion of Canada, as at Mar. 31, 1934–38 875–876
Subsection 2. Receipts and Disbursements 876–885
2. Details of Revenue Receipts, fiscal years 1934–38 877–878
3. Details of Expenditures, fiscal years 1934–38 878–880
4. Principal Items of Dominion Expenditure, fiscal years 1868–1938 881–882
5. Analysis of "Other Expenditures" (shown in Table 4), 1930–38 883
6. Principal Items of Receipts (Ordinary) and Total Receipts, fiscal years 1868–1938 883–884
7. Per Capita Figures of Taxation, Total Revenue Receipts, Expenditure on Consolidated Fund Account and Total Expenditures, 1868–1938 884
8. Per Capita Revenue Receipts and Expenditures, by Principal Items, 1934–38 885
Subsection 3. War Tax Revenue 886–891
9. War Tax Revenues Received by the Receiver General, fiscal years 1915, 1919, 1920, and 1925–38 886
10. Income Assessed for the Purposes of the Income War Tax, by Provinces, fiscal years 1934–38 887
11. Amounts of Income Tax Collected, by Provinces, fiscal years 1934–38 887
12. Income Assessed for the Purposes of the Income War Tax, by Individuals and Corporations, fiscal years 1921–38 887
13. Income Tax Paid (Individuals and Corporations) by Size of Income, fiscal years 1935–38 888
14. Income Tax Paid (Individuals and Corporations) by Occupations of the Taxpayers, fiscal years 1935–38 889
15. Amounts Received from Special Five Per Cent Tax on Interest and Dividends, fiscal years 1934–38 890
16. Summary of Excise War Taxes Collected by the Department of National Revenue, fiscal years 1933–38 890
17. Excise War Taxes Collected by the Department of National Revenue, by Provinces, fiscal year 1938 891
Subsection 4. Inland Revenue 892–894
18. Details of Excise Duties Collected, fiscal years 1933–38 893
19. Statistics of Distillation, fiscal years 1933–38 893
20. Quantities of Spirits, Malt Liquor, Malt, and Tobacco Taken Out of Bond for Consumption, fiscal years 1920–38 894
Subsection 5. Subsidies and Loans to Provinces 894–897
21. Subsidies of Dominion to Provincial Governments, fiscal years 1933–38 896
22. Total of Subsidy Allowances to Provincial Governments from July 1, 1867, to Mar. 31, 1938 896
23. Loans to Provincial Governments Under the Relief Acts, by Provinces, fiscal years 1935–39 897
24. Loans to Provincial Governments Outstanding, on Account of Housing, by Provinces, as at Mar. 31, 1920–39 897
Subsection 6. National Debt 898–906
25. Summary of the Public Debt of Canada and Interest Payments Thereon, July 1, 1867 to Mar. 31, 1938 900–901
26. Funded Debt and Treasury Bills of the Dominion, Date of Maturity, Rate of Interest Payable Thereon, and Centres at Which Loans are Payable, Amount of Loans Outstanding, and Total Annual Interest Charges, as at Mar. 31, 1938 901–902
27. The Interest-Bearing Debt, the Annual Interest Charge Thereon and the Average Rate of Interest, as at Mar. 31, 1913–38 903
28. Securities Guaranteed by the Dominion Government (Amounts Held by the Public), as at Mar. 31, 1914–38 904
29. Securities Guaranteed by the Dominion Government, as at Mar. 31, 1938 905–906

CHAPTER XXI.—PUBLIC FINANCE—concluded.

PAGE.
Section 2. *Provincial Public Finance* 907–918
  Subsection 1. Provincial Revenues and Expenditures 908–915
    30. Ordinary Revenues and Expenditures of Provincial Governments for their respective fiscal years ended in the census years 1871–1926 and in each year from 1931-37 910
    31. Ordinary Revenues and Expenditures of Provincial Governments per Head of Population for their respective fiscal years ended in the census years 1871–1926, and in each year from 1931-37 911
    32. Ordinary, Capital, and Trust and Charity Revenues of Provincial Governments for their respective fiscal years ended in 1937 912–913
    33. Ordinary, Capital, and Trust and Charity Expenditures of Provincial Governments for their respective fiscal years ended in 1937 914–915
  Subsection 2. Provincial Debts and Assets 916–918
    34. Gross Bonded Debt (Exclusive of Treasury Bills) of Provincial Governments, by Provinces, for their respective fiscal years 1916, 1921, 1926, and 1931–37 916
    35. Debts of Provincial Governments at ends of their respective fiscal years in 1936 and 1937, showing Bonded Debt with Offsetting Sinking Funds, Treasury Bills, Other Direct Liabilities, Available Assets Offsetting Direct Liabilities, and Indirect Liabilities 917
Section 3. *Municipal Public Finance* 918–924
    36. Numbers of Municipalities, by Provinces and Classes, 1936 919
    37. Tax Receipts of Municipalities in Canada, by Provinces, 1913–36 920
    38. Summary Statement showing Total Assessment Valuations of Municipalities, by Provinces, 1932–36 921
    39. Total Bonded Indebtedness of All Classes of Municipalities, by Provinces, 1919–36 922
    40. Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1936 923–924
Section 4. *National Wealth and Income* 924–931
  Subsection 1. National Wealth 924–927
    41. Estimate of the National Wealth of Canada, with Percentage and Per Capita Distribution of Component Items, 1929 and 1933 926
    42. Provincial Distribution of the National Wealth of Canada, with Percentage and Per Capita Analyses, 1929 and 1933 927
  Subsection 2. National Income 927
  Subsection 3. British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad 928–931
    43. Estimated British and Foreign Capital Invested in Canada, Classified According to Main Types, as at Dec. 31, 1926 and 1929–37 930
    44. Estimated Canadian Investments Abroad as at Dec. 31, 1926 and 1929–37 930
    45. Estimated British and Foreign Capital Invested in Canada as at Dec. 31, 1937 931
    46. Estimated Canadian Investments Abroad as at Dec. 31, 1937 931

CHAPTER XXII.—CURRENCY AND BANKING; MISCELLANEOUS COMMERCIAL FINANCE.

Part I.—Currency and Banking 932–958
Section 1. *Historical Sketch* 932
Section 2. *The Bank of Canada* 932–935
  Subsection 1. The Bank of Canada Act and its Amendments 932–934
  Subsection 2. The Bank of Canada and Its Relationship to the Canadian Financial System 934
  Subsection 3. Bank of Canada Operations 934–935
    1. Liabilities and Assets of the Bank of Canada, Mar. 13, 1935 and Dec. 31, 1936–38 .. 934
Section 3. *Currency* 936–940
  Subsection 1. Canadian Coinage 936–937
    2. Particulars of Canadian Coinages Current in 1939 936
    3. Circulation of Canadian Coin as at Dec. 31, 1926–38 936
    4. Annual Receipts of Gold Bullion at the Ottawa Mint, and Bullion and Coinage Issued, calendar years 1926–38 937
  Subsection 2. Dominion and Bank of Canada Notes 937–939
    5. Denominations of Dominion or Bank of Canada Notes in Circulation, 1926, 1929, 1932, and 1936–38 939
  Subsection 3. Chartered Bank Notes 939–940
    6. Note Circulation in the Hands of the Public, 1926–38 940
Section 4. *Monetary Reserves* 940–941
  Subsection 1. Bank of Canada Reserves 940
  Subsection 2. Chartered Bank Canadian Cash Reserves 940–941
    7. Cash Reserves of the Chartered Banks in Canada, 1926–38 941
Section 5. *Commercial Banking* 941–956
  Subsection 1. Historical 941–943
    8. Bank Absorptions in Canada since 1867 942–943
  Subsection 2. Combined Statistics of Chartered Banks 943–951
    9. Historical Summary showing Development of the Canadian Chartered Banking Business, calendar years 1867–1938 944–945
    10. Assets of Chartered Banks, 1929, 1932, and 1936-38 946
    11. Liabilities of Chartered Banks, 1929, 1932, and 1936–38 947
    12. Ratio Comparisons of Certain Assets and Liabilities of Chartered Banks, 1926–38. 947
    13. Classification of Deposits, According to Size, in Chartered Banks in Canada, as at Oct. 31, 1936–38 948
    14. Loans, According to Class, made by Chartered Banks in Canada, and Outstanding as at Oct. 31, 1936–38 948
    15. Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada, calendar years 1934–38 949–950
    16. Bank Debits at the Clearing-House Centres of Canada, by Individual Centres, calendar years 1934–38 951

CHAPTER XXII.—CURRENCY AND BANKING; MISCELLANEOUS COMMERCIAL FINANCE—concluded.

Part I.—Currency and Banking—concluded. PAGE.
Section 5. *Commercial Banking*—concluded.
Subsection 3. Statistics of Individual Chartered Banks.................. 951–956
17. Principal and Total Assets of Individual Chartered Banks, 1929 and 1935–38..... 952
18. Principal and Total Liabilities of Individual Chartered Banks, 1929 and 1935–38. 953
19. Net Profits of Canadian Banks and Rates of Dividend Paid, for their business years ended 1933–38.................. 954
20. Numbers of Branches of Chartered Banks in Canada, by Provinces, as at Dec. 31, 1868, 1902, 1905, 1920, 1926, 1930, 1935–38.................. 955
21. Numbers of Branches of Individual Canadian Chartered Banks in each Province and outside Canada as at Dec. 31, 1938.................. 955
22. Numbers of Branches of each of the Canadian Chartered Banks in Other Countries, with their Locations, as at Dec. 31, 1937 and 1938.................. 956
Section 6. *Government and Other Savings Banks*.................. 956–958
23. Deposits with Dominion Government Savings Banks, representative years 1868–1900, and 1905–38 inclusive.................. 957
24. Summary of the Financial Business of the Post Office Savings Bank, Mar. 31, 1933–38.................. 957
25. Deposits in the Montreal City and District Bank and the Caisse d'Economie de Notre-Dame de Québec, representative years 1868–1900, and 1905–38 inclusive. 958

Part II.—Miscellaneous Commercial Finance.................. 959–969
Section 1. *Loan and Trust Companies*.................. 959–963
1. Summary Statistics of the Operations of Dominion and Provincial Loan and Trust Companies in Canada, as at Dec. 31, 1937.................. 960
2. Classification of Assets and Liabilities of Loan Companies Chartered by the Dominion Government, as at Dec. 31, 1920–37.................. 961
3. Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920–37.................. 962–963
4. Amounts of Estates, Trust, and Agency Funds of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920–37.................. 963
Section 2. *Small Loans Companies*.................. 963–964
5. Classification of Assets and Liabilities of Small Loans Companies Chartered by the Dominion Government, as at Dec. 31, 1928–37.................. 964
Section 3. *Sales of Canadian Bonds*.................. 964–966
6. Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1926–38.................. 965–966
Section 4. *Corporation Dividends*.................. 966
7. Dividend Payments of Canadian Companies, by months, 1931–38.................. 966
Section 5. *Foreign Exchange*.................. 967–969
8. Monthly Averages of Exchange Quotations at Montreal, 1937 and 1938.................. 968–969

CHAPTER XXIII.—INSURANCE.

Section 1. *Fire Insurance*.................. 971–983
1. Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869–1938.................. 973–974
2. Fire Insurance Business Transacted in Canada, by Companies Operating Under Dominion Registration, 1937.................. 974–978
3. Assets of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Assets in Canada of Companies other than Canadian Transacting such Business in Canada, 1933–37.................. 979
4. Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1933–37.................. 979–980
5. Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1933–37.......... 980–981
6. Net Premiums Written and Net Losses Incurred in Canada by Canadian Companies Operating under Dominion Registration, and by British and Foreign Companies Transacting Fire Insurance Business, by Provinces, 1936 and 1937.. 981
7. Dominion and Provincial Fire Insurance in Canada, 1937, with Totals for 1936.... 982
8. Fire Losses in Canada, 1926–38.................. 982
9. Fire Losses in Canada, by Provinces, Percentages of Losses Covered by Insurance, 1929–38.................. 982–983
Section 2. *Life Insurance*.................. 983–997
10. Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, calendar years 1869–1938.................. 984
11. Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, 1937.................. 985–986
12. Progress of Life Insurance Effected under Dominion Registration, calendar years 1933–37.................. 986–987
13. Ordinary and Industrial Life Insurance Policies in Force and Issued in Canada by Companies Operating under Dominion Registration, 1937.................. 987
14. Insurance Death Rates in Canada, 1934–37.................. 987
15. Assets of Canadian Life Companies with Dominion Registration, and Assets in Canada of Life Companies other than Canadian Companies, 1933–37.......... 988
16. Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1933–37. 988–989
17. Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1933–37.................. 989–990

CHAPTER XXIII.—INSURANCE—concluded.

Section 2. *Life Insurance*—concluded. PAGE.
18. Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1933–37 991–992
19. Summary of Dominion and Provincial Life Insurance in Canada, by Class of Licensee and by Type of Company, 1937 993
20. Life Insurance Effected and in Force, and Reserves by Canadian Companies (Excluding Fraternal Societies) Operating under Dominion Registration, in Currencies other than Canadian, by Companies, 1937, with Totals for 1936 994–995
21. Life Insurance in Force by Canadian Companies (Excluding Fraternal Societies) Operating under Dominion Registration, in Currencies other than Canadian, by Currencies, 1937 995–996
22. Summary of the Business of Canadian Life Companies Abroad and of the Grand Total of All Life Business in Canada and Business of Canadian Companies Abroad, 1937 996–997
Section 3. *Miscellaneous Insurance* 997–1000
23. Insurance by Companies Registered by the Dominion Government to Transact Business other than Fire and Life in Canada, by Class of Insurance, 1937 998
24. Income and Expenditure, and Assets and Liabilities of Canadian Companies Operating under Dominion Registration doing Insurance Business other than Fire and Life, 1937 998
25. Income and Expenditure in Canada of Companies, other than Canadian, doing Insurance Business other than Fire and Life, 1937 999
26. Dominion and Provincial Insurance in Canada, other than Fire and Life, 1937 1000
Section 4. *Government Annuities* 1001–1002
27. Government Annuities Contracted for, and Purchase Money Received, fiscal years 1909–38 1001
28. Government Annuities Fund Statement, fiscal years 1934–38 1002
29. Valuation of Annuity Contracts Issued as at Mar. 31, 1937 and 1938 1002

CHAPTER XXIV.—COMMERCIAL FAILURES.

1. Industrial and Commercial Failures in Canada, by Classes, 1934–38, and by Provinces, 1938 1003
2. Industrial and Commercial Failures in Canada, by Provinces, 1936–38 1004
3. Industrial and Commercial Failures in Canada, by Divisions of Industry, 1936–38. 1004–1005
4. Commercial Failures in Canada, by Provinces, 1922–38 1006
5. Commercial Failures in Canada, by Branches of Business, 1924–38 1006
6. Estimated Assets and Liabilities of Commercial Failures in Canada, 1922–38 1006
7. Commercial Failures in Canada, by Provinces, and Branches of Business, 1937, with Totals for 1936 1007
7A. Commercial Failures in Canada, by Provinces and Branches of Business, 1938, with Totals for 1937 1008
8. Totals of Assets, Liabilities, Assets Realized, and Costs of Administration in Bankrupt Estates Closed, 1933–38, and by Provinces, 1938 1009

CHAPTER XXV.—EDUCATION.

Section 1. *Schools, Colleges, and Universities* 1010–1023
1. Number of Persons of the 1931 Population who were of School Age (5-19) in 1931, and at the dates of the Seven Previous Censuses 1011
2. Enrolment in Educational Institutions in Canada, by Provinces, School year, 1936–37 1013
Subsection 1. Provincially-Controlled Schools 1014–1018
3. Average Daily Attendance in Provincially-Controlled Schools, by Provinces, 1921–37 1014
4. Age Distribution of Pupils in Provincially-Controlled Schools, by Provinces, 1937. 1015
5. Average Annual Salaries Received by Teachers in Rural and Urban Schools, by Provinces, 1926 and 1931–37 1017
6. Financial Support of Provincially-Controlled Schools in Canada, by Provinces, 1926, 1931, and latest years 1018
Subsection 2. Private Schools 1019
7. Enrolment in Private Elementary and Secondary Schools in Canada, by Provinces, 1921, 1926, 1931, 1936 and 1937 1019
8. Enrolment in Private Business and Commercial Schools (Business Colleges) in Canada, by Provinces, 1921, 1926, 1931, 1936, and 1937 1019
Subsection 3. Higher Education 1019–1023
9. Graduates from Canadian Universities and Colleges, 1930–37 1020–1023
Section 2. *Scientific and Industrial Research in Canada* 1023
Section 3. *Libraries* 1023–1025
10. Summary Statistics of Public Libraries, by Provinces, 1937, with Totals for 1935, 1933, and 1931 1024
Section 4. *Museums* 1025–1026
11. Museums, Art Galleries, and Archives in Canada, Reporting Full-Time Staffs, 1937 1025–1026
Section 5. *Art in Canada* 1026

CHAPTER XXVI.—PUBLIC HEALTH AND RELATED INSTITUTIONS.

Section 1. *Administration* 1027–1036
Subsection 1. Public Health Activities of the Dominion Government 1028–1030
Subsection 2. Public Health Activities of the Provincial Governments 1031–1036
Section 2. *Institutional Statistics* 1036–1047
1. Numbers of Operating Institutions in Canada, by Provinces, 1937 1036–1037

CHAPTER XXVI.—PUBLIC HEALTH AND RELATED INSTITUTIONS—concluded.

PAGE.

Section 2. *Institutional Statistics*—concluded.
  Subsection 1. Statistics of Hospitals, other than Mental 1037–1043
    2. Summary Statistics of Reporting Public and Private Hospitals in Canada, 1933–37 1037
    3. Statistics of Reporting Public and Private Hospitals, by Provinces, Showing Staff, Facilities, and Movement of Population, 1937 1038–1039
    4. Public Hospitals Reporting Out-Patient Departments, 1937 1040
    5. Statistics of Dominion Government Hospitals, by Department under which Administered, Location, etc., fiscal year 1938 1041–1043
  Subsection 2. Statistics of Mental Hospitals 1044–1045
    6. Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, 1937 1044–1045
  Subsection 3. Charitable and Benevolent Institutions 1045–1046
    7. Summary Statistics of Charitable and Benevolent Institutions in Canada, by Provinces, 1936 1045–1046
  Subsection 4. Corrective and Reformative Institutions 1046–1047
    8. Summary Statistics of Corrective and Reformative Institutions, by Provinces, June 1, 1936 1046–1047
Section 3. *The Victorian Order of Nurses* 1047
Section 4. *The Canadian Red Cross Society* 1047–1048

CHAPTER XXVII.—JUDICIAL AND PENITENTIARY STATISTICS.

Section 1. *General Tables* 1049–1053
    1. Convictions for All Offences (Juveniles Included), years ended Sept. 30, 1886–1937, showing Numbers and Percentages of Indictable and Summary (or Non-Indictable) Offences, and Rates per 100,000 Population 1050–1051
    2. Convictions and Sentences for All Offences (Juveniles Included), by Provinces, years ended Sept. 30, 1931–37 1052–1053
    3. Appeals in Criminal Cases, calendar year 1937 1053
Section 2. *Offences of Adults* 1054–1066
    4. Convictions for Indictable and Summary Offences, by Class of Offence, Compared as to Numbers and Ratios, years ended Sept. 30, 1933–37 1054
  Subsection 1. Convictions of Adults for Indictable Offences 1055–1061
    5. Convictions of Persons 16 Years of Age or Over for Indictable Offences, by Provinces, years ended Sept. 30. 1911–37 1055
    6. Numbers of Persons Convicted of More than One Crime at the Time of Trial Compared with the Numbers Convicted of One Crime, years ended Sept. 30, 1933–37 1056
    7. Charges, Convictions, and Percentages of Acquittals for Indictable Offences, by Provinces, years ended Sept. 30, 1935–37 1056
    8. Indictable Offences, by Classes, years ended Sept. 30, 1935–37 1057–1058
    9. Charges, Acquittals, Convictions, and Sentences in respect of Indictable Offences, years ended Sept. 30, 1931–37 1059
    10. Females Convicted of Indictable Offences, by Provinces, years ended Sept. 30, 1933–37 1059
    11. Persons Convicted of Indictable Offences, Classified by Occupation, Conjugal Condition, Birthplace, Religion, etc., years ended Sept. 30, 1931–37 1060
    12. Numbers and Percentages of First Offences, Second Offences, and Reiterated Offences of an Indictable Nature, years ended Sept. 30, 1933–37 1061
  Subsection 2. Summary Convictions of Adults 1061–1066
    13. Summary Convictions, by Provinces, years ended Sept. 30, 1911–37 1061
    14. Summary Convictions, by Offences, years ended Sept. 30, 1933–37 1062
    15. Convictions for Drunkenness, by Provinces, years ended Sept. 30, 1911–37 1063
    16. Convictions for Offences against the Liquor Acts, by Provinces, years ended Sept. 30, 1911–37 1064
    17. Convictions for Breaches of Traffic Regulations, by Provinces, years ended Sept. 30, 1911–37 1065
Section 3. *Juvenile Delinquency* 1066–1069
    18. Convictions of Juveniles for All Offences, showing Percentages of Major and Minor Offences, and Rates per 100,000 of Total Population, years ended Sept. 30, 1922–37 1066
    19. Convictions of Juveniles for Major Offences and of Adults Aged 16–21 for Indictable Offences, by Age Groups and Rates per 100,000 Population of the Same Age, years ended Sept. 30, 1911, 1921, 1931, and 1936–37 1067
    20. Juvenile Delinquents Convicted of Major and Minor Offences, by Provinces and Sex, years ended Sept. 30, 1936 and 1937 1067
    21. Juvenile Delinquents Convicted of Major Offences, by Offences, years ended Sept. 30, 1930–37 1068
    22. Juvenile Offenders Convicted of Major Offences, showing Number of Times Convicted, years ended Sept. 30, 1928–37 1068
    23. Convictions of Juveniles for Minor Offences showing Percentages of Minor Offences to All Offences and Rates per 100,000 Population, years ended Sept. 30, 1933–37. 1069
Section 4. *Municipal Police Statistics* 1069–1070
    24. Police Statistics of Canadian Cities and Towns, by Provinces, calendar years 1936 and 1937 1070
Section 5. *Penitentiary Statistics* 1070–1073
    25. Population of Penal Institutions, 1935–37 1071
    26. Movement of Convicts in Penitentiaries, fiscal years 1931-38 1072
    27. Ages of Convicts in Penitentiaries, as at Mar. 31, 1931–38 1072
    28. Convicts in Penitentiaries, Classified by Race, Birthplace, Religion, etc., as at Mar. 31, 1931–38 1073

CHAPTER XXVIII.—MISCELLANEOUS ADMINISTRATION.

PAGE.
Section 1. *Public Lands* 1074–1078
  1. Summary of Classification of Lands in Canada, by Tenure *(circa)* 1938 1074
  Subsection 1. Dominion Public Lands 1075–1077
  Subsection 2. Provincial Public Lands 1078
Section 2. *National Defence* 1078–1083
  Subsection 1. The Naval Service 1078–1080
  Subsection 2. Military Forces 1080–1082
  2. Permanent and Non-Permanent Active Militia in Canada, 1938 1081
  Subsection 3. Air Force 1082–1083
  Subsection 4. The Royal Military College 1083
Section 3. *Department of Public Works* 1084
Section 4. *The Indians and Eskimos of Canada* 1084–1088
  Subsection 1. The Indians of Canada 1084–1088
  3. Indian Population of Canada at the Decennial Censuses of 1871–1931 1086
  4. Enrolment and Average Attendance of Pupils at Indian Schools, fiscal years 1916–38 1087
  5. Acreages (Classified) and Value of Indian Lands, by Provinces, as at Mar. 31, 1938 1087
  6. Values and Sources of Income of Indians, by Provinces, calendar year 1937 1088
  Subsection 2. The Eskimos of Canada 1088
Section 5. *Pensions and other Provision for War Veterans* 1088–1093
  7. Pensions in Force as at Mar. 31, 1918–38 1091
Section 6. *Soldier Settlement of Canada* 1094
Section 7. *Department of the Secretary of State* 1094–1097
  8. Number and Capitalization of Companies Incorporated under the Companies Act and Amending Acts, fiscal years 1914–38 1095
  9. Naturalizations in Canada, by Principal Nationalities, calendar years 1928–37 1096
Section 8. *Royal Canadian Mounted Police* 1097–1098
  10. Strength and Distribution of the Royal Canadian Mounted Police, as at Dec. 31, 1938 1098
Section 9. *The Civil Service of Canada* 1099–1103
  11. Summary of Civil Service Employees (Permanent and Temporary) of the Government of Canada, together with Total Salaries, in the months of January of the years 1912–38, inclusive 1100
  12. Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1937, and March ,1938 1101–1103
Section 10. *Supervision of Race-Track Betting* 1103–1104
  13. Race-Track Betting in Canada, fiscal years 1924–37 1103
  14. Race-Track Betting in Canada, by Provinces, fiscal year 1937 1104
Section 11. *The Tariff Board* 1104
Section 12. *Dominion Trade and Industry Commission* 1105
Section 13. *Other Miscellaneous Administration* 1105

CHAPTER XXIX.—SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION RELATIVE TO CANADA.

Section 1. *The Dominion Bureau of Statistics* 1106–1120
Section 2. *Acts Administered by Dominion Departments* 1120–1122
Section 3. *Publications of Dominion Departments* 1123–1128
Section 4. *Publications of Provincial Governments* 1128–1135
Section 5. *Reports of Dominion and Provincial Royal Commissions, Together with a Selection of Reports of British Royal Commissions having a Bearing on Canada* 1135–1141

CHAPTER XXX.—THE ANNUAL REGISTER, 1938-39.

Section 1. *Dominion Legislation, 1938* 1142–1151
Section 2. *Principal Events of the Year* 1151–1163
  Subsection 1. The Economic and Financial Year, 1938 1151–1155
  Subsection 2. Other Principal Events of the Year 1155–1161
  Subsection 3. Obituary 1161–1163
Section 3. *Extracts from the Canada Gazette—Official Appointments, Commissions, etc* 1163–1167

APPENDIX.

External Trade of Canada in the fiscal year 1938-39 1168
Survey of Production, 1936-37 1169

LIST OF ILLUSTRATIONS, MAPS, AND DIAGRAMS.

Page.
His Majesty King George VI .... frontispiece
Her Majesty Queen Elizabeth .... frontispiece
Official Unveiling of the National War Memorial .... frontispiece
The Royal Visit to Parliament .... frontispiece
Their Majesties Enthroned in the Senate Chamber .... frontispiece
Map: Dominion of Canada .... *insert facing page* vi
Map: Orographical Map of Canada .... *insert facing page* 10
Map: Physiographic Divisions of Canada 15
Map: Geology of Canada .... *insert facing page* 24
Map: Census Divisions of Western Canada, 1931 87
Diagram: Death Rates per 100,000 Population in Canada, 1926–1937 137
Diagram: Total Immigrant Arrivals into Canada, 1867–1938 155
Diagram: Percentage of Immigrant Population to Total Population, by Provinces, 1931 155
Diagram: Value of Net Production, 1936 compared with 1935 182
Map: Agricultural Areas of Canada .... *insert facing page* 188
Diagram: Agricultural Production, 1918–1937 198
Map: Forest Classification .... *insert facing page* 248
Map: Infestations of the European Spruce Saw-Fly in Eastern North America, 1938 255
Forest Insect Pests and Their Control .... *insert facing page* 256
Map: Areas Infected by Spruce Bud-Worm and Jack Pine Bud-Worm in Ontario and Manitoba.. 257
Diagram: Pulpwood Production, Consumption, Export, and Value per Cord, 1908–1937 276
Diagram: Newsprint Production, 1913–1937 279
Diagram: Value of the Products of the Fisheries of Canada, 1917–1937 300
Diagram: Value of Mineral Production, by Classes, in Canada, 1907–1937 318
Diagram: Quantity Production of Three Leading Metallic and Three Non-Metallic Minerals 318
Map: Canada (exclusive of Northern Regions) Water Powers 358
Diagram: Progress of Water Power Development in Canada, December 31, 1900 to 1938 361
Diagram: Central Electric Stations, 1924–1938 363
Diagram: World Trade, 1929–1938 477
Map: Movement of Canadian Wheat Crop, 1937–1938 581
Diagram: Percentages of Used and New Motor Vehicles Sold in Canada, 1937 615
Diagram: Chain and Department Store Sales 618
Map: Canadian Press Leased Wire System, 1938 .... *insert facing page* 750
Diagram: The Trend of Employment 805
Diagram: Estimated Employment and Unemployment of Wage-Earners, 1921–1938 813
Diagram: Canadian Index Numbers of Wholesale Prices and Living Costs, 1914–38 850
Diagram: Index Numbers of Industrial Materials 854
Diagram: Public Debt of Canada 872
Diagram: Bank of Canada Sources of Distribution and Cash 935
Diagram: Percentage Distribution of the Total Assets of the Chartered Banks, 1867–1938 943

THE

STATISTICAL SUMMARY

OF THE

PROGRESS OF CANADA

1871-1938.

NOTE.—In the following Summary, the statistics of fisheries (1871-1916), trade, shipping, the Post Office, the public debt, revenue and expenditure and the Post Office and Government savings banks relate to the fiscal years ended June 30 up to 1906; subsequently to years ended Mar. 31. Agricultural, dairying, fisheries (from 1922), mineral, manufacturing, banking, insurance, loan and trust companies, construction, road transportation, vital, hospital, and immigration statistics relate to the calendar years and railway statistics to the years ended June 30, 1871-1916, and to the calendar years 1921 and 1926-38. Canal statistics are those of the navigation seasons. The telegraph statistics relate to the fiscal years for Government lines and to the calendar years for other lines.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA.

Area of the Dominion of Canada in square miles: Land, 3,466,556; Fresh Water, 228,307; Total, 3,694,863.

NOTE.—Dashes in this table indicate that comparable data or estimates are not available for the years so indicated.

	Item.		1871.	1881.	1891.	1901.	1906.
	Population—[1], [3]						
1	Prince Edward Island	No.	94,021	108,891	109,078	103,259	96,000
2	Nova Scotia	“	387,800	440,572	450,396	459,574	465,000
3	New Brunswick	“	285,594	321,233	321,263	331,120	334,000
4	Quebec	“	1,191,516	1,359,027	1,488,535	1,648,898	1,784,000
5	Ontario	“	1,620,851	1,926,922	2,114,321	2,182,947	2,299,000
6	Manitoba	“	25,228	62,260	152,506	255,211	366,000
7	Saskatchewan	“	–	–	–	91,279	258,000
8	Alberta	“	–	–	–	73,022	185,000
9	British Columbia	“	36,247	49,459	98,173	178,657	279,000
10	Yukon	“	–	–	–	27,219	18,000
11	Northwest Territories	“	48,000	56,446	98,967	20,129	13,000
	Canada	“	3,689,257	4,324,810	4,833,239	5,371,315	6,097,000
	Vital Statistics—[6]						
12	Births (live)	No.	–	–	–	–	–
	Rates per 1,000		–	–	–	–	–
13	Deaths, all causes	No.	–	–	–	–	–
	Rates per 1,000		–	–	–	–	–
14	Diseases of the heart[7]	No.	–	–	–	–	–
15	Cancer	“	–	–	–	–	–
16	Diseases of the arteries[7]	“	–	–	–	–	–
17	Tuberculosis (all forms)[7]	“	–	–	–	–	–
18	Pneumonia	“	–	–	–	–	–
19	Nephritis	“	–	–	–	–	–
20	Marriages	“	–	–	–	–	–
	Rates per 1,000		–	–	–	–	–
21	Divorces	No.	4	7	10	19	37
	Immigration (calendar years)—						
22	From United Kingdom	No.	–	17,033	22,042	11,810[8]	86,796[8]
23	From United States	“	–	21,822	52,516	17,987[8]	52,796[8]
24	From other countries	“	–	9,136	7,607	19,352[8]	44,472[8]
	Totals	“	27,773	47,991	82,165	49,149[8]	184,064[8]
	Agriculture—						
25	Area of occupied farms	acre	36,046,401	45,358,141	58,997,995	63,422,338	–
26	Improved lands	“	17,335,818	21,899,181	27,729,852	30,166,033	–
27	Gross value of agricultural production	$	–	–	–	–	–
	Field Crops—[10]						
28	Wheat	acre	1,646,781	2,366,554	2,701,213	4,224,542	–
		bu.	16,723,873	32,350,269	42,223,372	55,572,368	–
		$	16,993,265	38,820,323	31,667,529	36,122,039	–
29	Oats	acre	–	–	3,961,356	5,367,655	–
		bu.	42,489,453	70,493,131	83,428,202	151,497,407	–
		$	15,966,310	23,967,665	31,702,717	51,509,118	–
30	Barley	acre	–	–	868,464	871,800	–
		bu.	11,496,038	16,844,868	17,222,795	22,224,366	–
		$	8,170,735	11,791,408	8,611,397	8,889,746	–
31	Corn	acre	–	–	195,101	360,758	–
		bu.	3,802,830	9,025,142	10,711,380	25,875,919	–
		$	2,283,145	5,415,085	5,034,348	11,902,923	–
32	Potatoes	acre	403,102	464,289	450,190	448,743	–
		bu.	47,330,187	55,368,790	53,490,857	55,362,635	–
		$	15,211,774	13,288,510	21,396,342	13,840,658	–
33	Hay and clover	acre	3,650,419	4,458,349	5,931,548	6,543,423	–
		ton	3,818,641	5,055,810	7,693,733	6,943,715	–
		$	38,869,900	40,446,480	69,243,597	85,625,315	–
	Total Areas, Field Crops	acre	–	–	15,662,811	19,763,740	–
	Total Values, Field Crops[12]	$	111,116,606	155,277,427	194,766,934	237,682,285	–

---

[1] Estimates of population since the 1931 Census are subject to adjustment as later data are made available. [2] Figures for 1938 are subject to revision. [3] Estimated populations are given for intercensal and post-censal years. [4] Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927. [5] Includes Canadian Navy. [6] Exclusive of the Territories. [7] For these causes of death the comparability between the figures for the year 1926 and those for later years

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

The length of the Canada-United States boundary is 3,986·8 miles, and that of the Canada-Alaska boundary is 1,539·8 miles.

Note.—Dashes in this table indicate that comparable data or estimates are not available for the years so indicated.

1911.	1916.	1921.	1926.	1931.	1936.[1]	1937.[1]	1938.[1,2]	
93,728	92,000	88,615	87,000	88,038	92,000	93,000	94,000	1
492,338	505,000	523,837	515,000	512,846	537,000	542,000	548,000	2
351,889	368,000	387,876	396,000	408,219	435,000	440,000	445,000	3
2,005,776	2,154,000	2,360,665[4]	2,603,000	2,874,255	3,096,000	3,135,000	3,172,000	4
2,527,292	2,713,000	2,933,662	3,164,000	3,431,683	3,690,000	3,711,000	3,731,000	5
461,394	554,000	610,118	639,000	700,139	711,000	717,000	720,000	6
492,432	648,000	757,510	821,000	921,785	931,000	939,000	941,000	7
374,295	496,000	588,454	608,000	731,605	772,000	778,000	783,000	8
392,480	456,000	524,582	606,000	694,263	750,000	751,000	761,000	9
8,512	7,000	4,157	4,000	4,230	4,000	4,000	4,000	10
6,507	8,000	7,988	8,000	9,723	10,000	10,000	10,000	11
7,206,643	8,001,000	8,788,483[5]	9,451,000	10,376,786	11,028,000	11,120,000	11,209,000	
–	–	–	232,750	240,473	220,371	220,235	–	12
–	–	–	24·7	23·2	20·0	19·8	–	
–	–	–	107,454	104,517	107,050	113,824	–	13
–	–	–	11·4	10·1	9·7	10·2	–	
–	–	–	11,415	13,734	16,424	16,840	–	14
–	–	–	7,614	9,578	11,694	11,963	–	15
–	–	–	4,981	5,957	9,112	9,609	–	16
–	–	–	7,929	7,616	6,763	6,669	–	17
–	–	–	8,427	7,011	7,313	7,731	–	18
–	–	–	5,138	5,168	6,402	6,530	–	19
–	–	–	66,658	66,591	80,904	87,800	–	20
–	–	–	7·1	6·4	7·3	7·9	–	
57	67	548	608	692	1,526	1,870	1,883	21
144,076	8,596	43,772	48,819	7,678	2,197	2,859	3,389	22
112,028	41,779	23,888	20,944	15,195	4,876	5,555	5,833	23
75,184	5,539	24,068	66,219	4,657	4,570	6,687	8,022	24
331,288	55,914	91,728	135,982	27,530	11,643	15,101	17,244	
108,968,715	–	140,887,903	–	163,119,231	–	–	–	25
48,733,823	–	70,769,548	–	85,733,309	–	–	–	26
–	–	1,386,126,000	1,714,477,000	839,881,000	1,065,966,000[9]	1,039,492,000	1,020,217,000	27
8,864,514	15,369,709	17,835,734	22,895,649	26,355,136	25,604,800	25,570,200	25,930,500	28
132,077,547	262,781,000	226,508,411	407,136,000	321,325,000	219,218,000	180,210,000	350,010,000	
104,816,825	344,096,400	374,178,601	442,221,000	123,550,000	205,327,000	184,651,000[9]	205,351,000	
8,656,179	10,996,487	13,879,257	12,741,340	12,837,736	13,287,700	13,048,500	13,009,700	29
245,393,425	410,211,000	364,989,218	383,416,000	328,278,000	271,778,000	268,442,000	371,382,000	
86,796,130	210,957,500	180,989,587	184,098,000	77,970,000	116,267,000	114,093,000	89,600,000	
1,283,094	1,802,996	2,043,669	3,647,462	3,791,395	4,437,600	4,331,400	4,453,900	30
28,848,310	42,770,000	42,956,049	99,987,100	67,382,600	71,922,000	83,124,000	102,242,000	
14,653,697	35,024,000	33,514,070	52,059,000	17,465,000	49,512,000	42,020,000	28,383,000	
293,951	173,000	204,775	209,725	131,829	164,400	165,600	180,100	31
14,417,599	6,282,000	10,822,278	7,815,000	5,449,000	6,083,000	5,415,000	7,690,000	
5,774,039	6,747,000	7,081,140	7,780,000	2,274,000	4,258,000	3,466,000	3,614,000	
464,504	472,992	534,621	523,112	591,804	502,100	531,200	521,900	32
55,461,473	63,297,000	62,230,052	46,937,000[11]	52,305,000[11]	39,614,000[11]	42,547,000[11]	35,938,000[11]	
27,426,765	50,982,300	44,635,547	69,204,000	22,359,000	45,125,000	26,650,000	27,079,000	
8,289,407	7,821,257	8,678,883	9,516,125	9,114,457	8,784,100	8,693,300	8,819,800	33
10,406,367	14,527,000	8,829,915	14,058,000	14,539,600	13,803,000	13,030,000	13,798,000	
90,115,531	168,547,900	174,110,386	170,473,000	110,110,000	105,703,000	98,136,000	95,993,000	
30,556,168	38,930,333	47,553,418	56,097,836	58,862,305	58,146,850	57,826,900	58,070,500	
384,513,795	886,494,900	933,045,936	1,104,983,100	435,966,400	612,300,400	556,222,000	528,860,000	

---

is not exact owing to changes in classification. [8] Fiscal year. [9] Revised since the publication of the 1938 Year Book. [10] Figures for the decennial census years 1871–1921 are for the next preceding years; those for 1871 are for the four original provinces only. [11] Cwt. [12] See Monthly Bulletin of Agricultural Statistics for May, 1921, for particulars of the values of field crops for the years 1871, 1881 and 1901.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Live Stock and Poultry—						
1	Horses	No.	836,743	1,059,358	1,470,572	1,577,493	–
		$	–	–	–	118,279,419	–
2	Milk cows	No.	1,251,209	1,595,800	1,857,112	2,408,677	–
		$	–	–	–	69,237,970	–
3	Other cattle	No.	1,373,081	1,919,189	2,263,474	3,167,774	–
		$	–	–	–	54,197,341	–
4	Sheep	No.	3,155,509	3,048,678	2,563,781	2,510,239	–
		$	–	–	–	10,490,594	–
5	Swine	No.	1,366,083	1,207,619	1,733,850	2,353,828	–
		$	–	–	–	16,445,702	–
6	All poultry	No.	–	–	14,105,102	17,922,658	–
		$	–	–	–	5,723,890	–
	Total Values, Live Stock and Poultry	$	–	–	–	274,374,916	–
	Dairying—[2]						
7	Total milk production	'000 lb.	–	–	–	6,866,834	–
8	Cheese, factory	lb.	–	54,574,856	97,418,855	220,833,269	204,788,583[4]
		$	–	5,457,486	9,741,886	22,221,430	23,597,639[4]
9	Butter, creamery	lb.	–	1,365,912	3,654,364	36,066,739	45,930,294[4]
		$	–	341,478	913,591	7,240,972	10,949,062[4]
10	Butter, dairy	lb.	–	102,545,169	111,577,210	105,343,076	–
		$	–	–	–	21,384,644	–
11	Other dairy products[5]	$	–	–	–	15,623,907	–
	Total Values, Dairy Products	$	–	22,743,939	30,315,214	66,470,953	–
	Furs—						
12	Pelts taken	No.	–	–	–	–	–
		$	–	–	–	–	–
13	Value of animals on fur farms	$	–	–	–	–	–
	Forestry—						
14	Primary forest production	$	–	–	–	–	–
15	Lumber production	M ft. b.m.	–	–	–	–	–
		$	–	–	–	–	–
16	Total sawmill products	$	–	–	–	–	–
17	Pulp and paper products	$	–	–	–	–	–
18	Exports of wood, wood products and paper	$	–	–	25,351,085	33,099,915	45,716,762
19	**Fisheries**	$	7,573,199	15,817,162	18,977,874	25,737,153	26,279,485
	Mineral Production—						
20	Gold[7]	oz.	105,187	63,524	45,018	1,167,216	556,415
		$	2,174,412	1,313,153	930,614	24,128,503	11,502,120
21	Silver	oz.	–	355,083[8]	414,523	5,539,192	8,473,379
		$	–	347,271[8]	409,549	3,265,354	5,659,455
22	Copper	lb.	–	3,260,424[8]	9,529,401	37,827,019	55,609,888
		$	–	366,798[8]	1,226,703	6,096,581	10,720,474
23	Lead	lb.	–	204,800[8]	88,665	51,900,958	54,608,217
		$	–	9,216[8]	3,857	2,249,387	3,089,187
24	Zinc	lb.	–	–	–	788,000[9]	1,154
		$	–	–	–	36,011[9]	23,800
25	Nickel	lb.	–	830,477[10]	4,035,347	9,189,047	21,490,955
		$	–	498,286[10]	2,421,208	4,594,523	8,948,834
26	Pig iron	long ton	–	22,167[8]	21,331	244,979	534,295
27	Coal	short ton	1,063,742[11]	1,537,106	3,577,749	6,486,325	9,762,601
		$	1,763,423[11]	2,688,621	7,019,425	12,699,243	19,732,019
28	Natural gas	M cu. ft.	–	–	–	–	–
		$	–	–	150,000[12]	339,476	583,523
29	Petroleum, crude	bbl.	–	368,987	755,298	622,392	569,753
		$	–	–	1,010,211	1,008,275	761,760
30	Asbestos	short ton	–	–	9,279	40,217	82,185
		$	–	–	999,878	1,259,759	2,060,143
31	Cement	bbl.	–	69,843[8]	93,479	450,394	2,128,374
		$	–	81,909[8]	108,561	660,030	3,170,859
	Totals, Mineral Production[13]	$	–	10,221,255[14]	18,976,616	65,797,911	79,286,697

---

[1] Figures for 1938 are subject to revision. [2] Figures for the decennial census years 1881–1921 are for the next preceding years. In the Censuses of 1881 and 1891 values only were given of factory butter and cheese, and quantities have been calculated by reckoning cheese at 10 cents per lb. and butter at 25 cents. [3] Revised since the publication of the 1938 Year Book. [4] 1907. [5] Previous

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1936.	1937.	1938.[1]	
2,598,958	3,246,430	3,624,262	3,398,114	3,113,909	2,891,540	2,882,990	2,820,700	1
381,915,505	418,686,000	440,502,040	245,119,000	155,908.000	208,170,000	206,957,000	198,938,000	
2,595,255	2,835,552	3,324,653	3,839,191	3,371,923	3,885,300	3,940,400	3,873,800	2
109,575,526	198,896,000	203,555,836	201,236,000	143,616,000	143,316,000	156,467,000	154,732,000	
3,930,828	3,763,155	5,194,831	4,731,688	4,601,108	4,955,300	4,900,100	4,637,400	3
86,278,490	204,477,000	139,590,484	148,742,000	114,201,000	112,247,000	123,731,000	123,354,000	
2,174,300	2,025,023	3,203,966	3,142,476	3,627,116	3,327,100	3,339,900	3,415,000	4
10,701,691	20,927,000	20,704,509	31,417,000	18,596,000	18,077,000	18,741,000	19,761,000	
3,634,778	3,484,982	3,404,730	4,359,582	4,699,831	4,145,000	3,963,300	3,486,900	5
26,986,621	60,700,000	36,893,244	69,958,000	32,773,000	45,488,000	48,802,000	46,078,000	
31,793,261	–	50,325,248	50,108,516	65,468,000	59,339,400	57,510,100	57,237,000	6
14,653,773	–	31,750,247	51,037,000	43,138,000	40,366,000	42,954,000	42,350,000	
630,111,606	–	872,996,360	747,509,000	508,232,000	567,664,000	597,652,000	585,213,000	
9,806,741	–	10,976,235	13,407,340	15,772,852	15,324,414[3]	15,326,728	15,770,236	7
199,904,205	192,968,597	149,201,856	171,731,631	113,956,639	119,123,483	130,625,838	121,314,600	8
21,587,124	35,512,622	39,100,872	28,807,841	12,824,695	15,565,813	17,965,123	16,597,500	
64,489,398	82,564,130	111,691,718	177,209,287	225,955,246	250,931,777	247,056,746	266,886,900	9
15,597,807	26,966,355	63,625,203	61,753,390	50,198,878	57,662,160	64,217,332	66,080,700	
137,110,200	–	103,487,506	95,000,000	103,310,000	109,026,000[3]	108,084,000	105,076,000	10
30,269,497	–	50,180,952	28,252,777	21,450,000	20,006,000[3]	22,622,000	20,957,000	
35,927,426	–	–	158,490,971	106,916,119	105,437,791[3]	110,818,807	116,528,327	11
103,381,854	–	–	277,304,979	191,389,692	198,671,764[3]	215,623,262	220,163,527	
–	–	2,936,407	3,686,148	4,060,356	4,596,713	6,237,640	–	12
–	–	10,151,594	15,072,244	11,803,217	15,464,883	17,526,365	–	
–	–	5,977,545	11,153,838	8,497,237	9,838,280[3]	9,676,431	–	13
–	–	168,054,024	204,436,328	141,123,930	134,804,228	163,249,887	–	14
4,918,202	3,490,550	2,869,307	4,185,140	2,497,553	3,412,151	4,005,601	–	15
75,830,954	58,365,349	82,448,585	101,071,260	45,977,843	61,965,540	82,776,822	–	
–	115,884,905[6]	116,891,191	135,182,592	62,769,253	80,343,291	104,849,785	–	16
–	92,074,684[6]	149,216,005	215,370,274	174,733,954	185,144,603	226,255,915	–	17
56,334,695	83,116,282	284,561,478	278,674,960	230,604,474	181,831,743	223,918,476	253,434,860	18
29,965,142	35,860,708	34,931,935	56,360,633	30,517,306	39,165,055	38,976,294	–	19
473,159	930,492	926,329	1,754,228	2,693,892	3,748,028	4,096,213	4,715,480	20
9,781,077	19,234,976	19,148,920	36.263,110	58,093,396	131,293,421	143,326,493	165,867,009	
32,559,044	25,459,741	13,543,198	22,371,924	20,562,247	18,334,487	22,977,751	22,157,154	21
17,355,272	16,717,121	8,485,355	13,894,531	6,141,943	8,273,804	10,312,644	9,633,265	
55,648,011	117,150,028	47,620,820	133,094,942	292,304,390	421,027,732	530,028,615	586,020,402	22
6,886,998	31,867,150	5,953,555	17,490,300	24,114,065	39,514,101	68,917,219	58,026,972	
23,784,969	41,497,615	66,679,592	283,801,265	267,342,482	383,180,909	411,999,484	418,913,257	23
827,717	3,532,692	3,828,742	19,240,661	7,260,183	14,993,869	21,053,173	14,008,459	
1,877,479	23,364,760	53,089,356	149,938,105	237,245,451	333,182,736	370,337,589	381,506,588	24
108,105	2,991,623	2,471,310	11,110,413	6,059,249	11,045,007	18,153,949	11,723,697	
34,098,744	82,958,564	19,293,060	65,714,294	65,666,320	169,739,393	224,905,046	210,673,270	25
10,229,623	29,035,498	6,752,571	14,374,163	15,267,453	43,876,525	59,507,176	53,949,311	
819,228	1,043,979	593,829	757,317	420,038	678,231	898,855	705,099	26
11,323,388	14,483,395	15,057,493	16,478,131	12,243,211	15,229,182	15,835,954	14,247,783	27
26,467,646	38,817,481	72,451,656	59,875,094	41,207,682	45,791,934	48,752,048	43,912,204	
–	25,467,458	14,077,601	19,208,209	25,874,723	28,113,348	32,380,991	33,441,139	28
1,917,678	3,958,029	4,594,164	7,557,174	9,026,754	10,762,243	11,674,802	11,847,803	
291,092	198,123	187,540	364,444	1,542,573	1,500,374	2,943,750	6,956,229	29
357,073	392,284	641,533	1,311,665	4,211,674	3,421,767	5,399,353	11,826,594	
127,414	154,149	92,761	279,403	164,296	301,287	410,026	289,877	30
2,943,108	5,228,869	4,906,230	10,099,423	4,812,886	9,958,183	14,505,791	12,893,806	
5,692,915	5,369,560	5,752,885	8,707,021	10,161,658	4,508,718	6,168,971	5,519,102	31
7,644,537	6,547,728	14,195,143	13,013,283	15,826,243	6,908,192	9,095,867	8,241,350	
103,220,994	177,201,534	171,923,342	240,437,123	230,434,726	361,919,372	457,359,092	444,824,222	

to 1931 this item does not include skim milk and buttermilk. [6] 1917. [7] As from 1932 the values include exchange equalization. [8] 1887. [9] 1898. [10] 1889. [11] 1874. [12] 1892.

[13] Includes other items not specified. [14] 1886.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Central Electric Stations—						
1	Power houses	No.	–	–	80	58	157
2	Capital invested	$	–	–	4,113,771	11,891,025	80,393,445
3	Kilowatt hours generated[2]	No.	–	–	–	–	–
4	Customers	"	–	–	–	–	–
	Water Power—						
5	Turbine H.P. installed	No.	–	–	71,219	238,902	608,002
	Manufactures—[3]						
6	Employees	No.	187,942	254,935	272,033	339,173	383,920
7	Capital	$	77,964,020	165,302,623	353,213,000[4]	446,916,487	833,916,155
8	Salaries and wages	$	40,851,009	59,429,002	79,234,311	113,249,350	162,155,578
9	Values of materials used in	$	124,907,846	179,918,593	250,759,292[4]	266,527,858	–
10	Products—						
	Gross	$	221,617,773	309,676,068	368,696,723	481,053,375	706,446,578
	Net	$	96,709,927	129,757,475	117,937,431	214,525,517	–
	Construction—						
11	Values of contracts awarded	$	–	–	–	–	–
	Wholesale and Retail Trade—						
	Wholesale—						
12	Establishments	No.	–	–	–	–	–
13	Employees	"	–	–	–	–	–
14	Net sales	$	–	–	–	–	–
	Retail—						
15	Stores	No.	–	–	–	–	–
16	Employees, full-time	"	–	–	–	–	–
17	Net sales	$	–	–	–	–	–
	Retail Services—						
18	Establishments	No.	–	–	–	–	–
19	Employees, full-time	"	–	–	–	–	–
20	Receipts	$	–	–	–	–	–
	External Trade (fiscal years)—						
21	Exports[9]	$	57,630,024	83,944,701	88,671,738	177,431,386	235,483,956
22	Imports[10]	$	84,214,388	90,488,329	111,533,954	177,930,919	283,740,280
	Totals, External Trade	$	141,844,412	174,433,030	200,205,692	355,362,305	519,224,236
23	Total exports to British Empire	$	–	–	47,137,203	100,748,097	138,421,222
24	Exports to United Kingdom	$	21,733,556	42,637,219	43,243,784	92,857,525	127,456,465
25	Total imports from British Empire	$	–	–	44,337,052	46,653,228	83,789,434
26	Imports from United Kingdom	$	48,498,202	42,885,142	42,018,943	42,820,334	69,183,915
27	Exports to United States	$	29,164,358	34,038,431	37,743,430	67,983,673	83,546,306
28	Imports from United States	$	27,185,586	36,338,701	52,033,477	107,377,906	169,256,452
	Exports, Domestic, by Chief Items—						
29	Wheat	bu.	1,748,977	2,523,673	2,108,216	9,739,758	40,399,402
		$	1,981,917	2,593,820	1,583,084	6,871,939	33,658,391
30	Wheat flour	bbl.	306,339	439,728	296,784	1,118,700	1,532,014
		$	1,609,849	2,173,108	1,388,578	4,015,226	6,179,825
31	Oats	bu.	542,386	2,926,532	260,569	8,155,063	2,700,303
		$	231,227	1,191,873	129,917	2,490,521	1,083,347
32	Hay	ton	23,487	168,381	65,083	252,977	206,714
		$	290,217	1,813,208	559,489	2,097,882	1,529,941
33	Bacon and hams, shoulders and sides.	cwt.	103,444	103,547	75,541	1,055,495	1,029,079
		$	1,018,918	758,334	628,469	11,778,446	12,086,868
34	Butter	lb.	15,439,266	17,649,491	3,768,101	16,335,528	34,031,525
		$	3,065,234	3,573,034	602,175	3,295,663	7,075,539
35	Cheese	lb.	8,271,439	49,255,523	106,202,140	195,926,397	215,834,543
		$	1,109,906	5,510,443	9,508,800	20,696,951	24,433,169
36	Gold, raw	$	163,037	767,318	554,126	24,445,156	12,991,916
37	Silver	oz.	–	–	–	4,022,019	7,261,527
		$	595,261	34,494	238,367	2,420,750	4,310,528
38	Copper[12]	lb.	6,246,000	39,604,000	10,994,498	26,345,776	44,282.348
		$	120,121	150,412	505,196	2,659,261	7,148,633

---

[1] Figures for 1938 are subject to revision. [2] In thousands. [3] The statistics of manufactures in 1871 and 1881 include works employing fewer than 5 hands; those of 1891, 1901, 1911, and 1916 are for works employing only 5 hands or over except in the case of butter and cheese factories, flour and grist mills, electric light plants, lumber, lath and shingle mills, lime kilns, brick and tile works, and fish canneries. The figures shown are for the preceding years in each case. From 1922 statistics are exclusive of construction, hand trades, repair and custom work. Figures for 1926–37 include non-ferrous metal smelting not included in earlier years. [4] Includes all establishments irrespective of the number of employees.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1936.	1937.	1938.	
266	307	510	595	559	561	568	–	1
110,838,746	248,573,546	484,669,451	756,220,066	1,229,988,951	1,483,116,649	1,497,330,231	–	2
–	–	5,614,132	12,093,445	16,330,867	25,402,282	27,687,646	–	3
–	–	973,212	1,337,562	1,632,792	1,740,793	1,805,995	–	4
1,363,134	2,222,169	2,754,157	4,549,383	6,666,337	7,945,590	8,112,751	8,190,772	5
515,203	–	456,076	581,539	557,426	594,359	660,451	–	6
1,247,583,609	1,958,705,230	3,190,026,358	3,981,569,590	4,961,312,408	3,271,263,531	3,465,227,831	–	7
241,008,416	283,311,505	518,785,137	653,850,933	624,545,561	612,071,434	721,727,037	–	8
601,509,018	791,943,433	1,366,893,685	1,728,624,192	1,223,880,011	1,624,213,996	2,006,926,787	–	9
1,165,975,639	1,381,547,225	2,576,037,029	3,221,269,231	2,698,461,862	3,002,403,814	3,623,159,500	–	10
564,466,621	589,603,792	1,209,143,344	1,406,574,164[5]	1,390,409,237[5]	1,289,592,672[5]	1,506,624,867	–	
345,425,000	99,311,000	240,133,300	372,947,900	315,482,000	162,588,000	224,056,700	187,277,900	11
–	–	–	–	13,140[6]	–	–	–	13
–	–	–	–	90,564[6]	–	–	–	14
–	–	–	–	3,325,210,300[6]	–	–	–	
–	–	–	–	125,003[6]	–	–	–	15
–	–	–	–	238,683[6]	–	–	-	16
–	–	–	–	2,755,569,900[6]	2,208,142,000[7,8]	2,453,715,000[7]	–	17
–	–	–	–	42,223[6]	–	–	–	18
–	–	–	–	55,257[6]	–	–	–	19
–	–	–	–	249,455,900[6]	–	–	–	20
274,316,553	741,610,638	1,189,163,701	1,320,568,147	799,742,667	849,030,417	1,061,181,906	1,070,228,609	21
452,724,603	508,201,134	1,240,158,882	927,328,732	906,612,695	562,719,063	671,875,566	799,069,918	22
727,041,156	1,249,811,772	2,429,322,583	2,247,896,879	1,706,355,362	1,411,749,480	1,733,057,472	1,869,298,527	
148,967,442	482,529,733	403,452,219	598,567,995	292,864,396	399,311,479	495,598,105	517,439,020	23
132,156,924	451,852,399	312,844,871	508,237,560	219,246,499	321,556,798	407,996,698	409,411,682	24
129,467,647	105,229,977	266,002,688	208,820,128	204,898,426	177,721,310	198,165,842	233,205,416	25
109,934,753	77,404,361	213,973,562	163,731,210	149,497,392	117,874,822	129,507,885	145,008,771	26
104,115,823	201,106,488	542,322,967	480,199,723	349,660,563	360,302,426	435,014,544	423,131,091	27
275,824,265	370,880,549	856,176,820	608,618,542	584,407,018	319,479,594	393,720,662	487,279,507	28
45,802,115	157,745,469	129,215,157	249,679,470	217,243,037	179,124,180	227,996,513	89,628,923	29
45,521,134	172,896,445	310,952,138	364,364,388	177,419,769	148,576,975	223,461,009	116,273,709	
3,049,046	6,400,214	6,017,032	10,084,974	7,218,188	4,858,947	4,771,007	3,904,888	30
13,854,790	35,767,044	66,520,490	69,687,598	32,876,234	19,382,617	21,587,038	23,221,366	
5,431,662	26,816,322	14,321,048	43,058,283	3,258,501	12,739,083	8,142,122	4,727,833	31
2,144,846	14,637,849	14,152,033	24,237,692	1,146,266	4,520,822	3,176,469	2,572,102	
326,132	255,407	179,398	368,787	156,722	58,658	204,592	115,443	32
2,723,291	5,849,426	4,210,594	3,711,840	1,590,657	613,215	1,521,953	835,741	
598,745	1,536,517	982,338	1,253,760	121,770	1,201,012	1,757,048	1,922,064	33
8,526,332	27,090,113	31,492,407	28,590,301	2,914,273	19,407,285	28,801,291	33,404,206	
3,142,682	3,441,183	9,739,414	23,303,865	1,162,900	7,691,100	5,140,600	4,134,900	34
744,288	1,018,769	5,128,831	8,773,125	389,419	1,795,784	1,183,633	1,163,288	
181,895,724	168,961,583	133,620,340	148,333,500	79,590,400	58,544,900	80,739,100	87,947,500	35
20,739,507	26,690,500	37,146,722	33,718,587	12,989,726	6,789,588	11,236,543	12,938,568	
5,344,465	16,870,394	3,038,779	25,968,094	17,832,608	4,802,029[11]	6,497,281[11]	7,461,614[11]	36
33,731,010	27,794,566	13,331,050	18,382,415	24,695,827	20,191,018	16,187,592	22,214,077	37
17,269,168	14,298,351	11,127,432	12,365,576	8,927,216	12,473,960	7,243,750	9,913,475	
55,005,342	111,046,300	36,167,900	61,090,600	62,997,100	37,897,300	52,172,900	89,224,800	38
5,575,033	14,670,073	4,336,972	7,037,206	5,629,512	2,024,180	3,963,652	8,050,159	

---

[5] See footnote 1 to p. 379 of this volume. [6] Census figures for calendar year 1930. [7] Estimated on basis of intercensal survey of larger establishments. [8] Revised since the publication of the 1938 Year Book. [9] Exports of domestic merchandise only. [10] Imports of merchandise for home consumption. [11] Exclusive of exports of domestic gold bullion which, valued at the average current market price, amounted to $83,414,854 in 1936, $76,667,269 in 1937, and $86,203,736 in 1938. [12] Copper, fine, contained in ore, matte, regulus, etc.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Exports, Domestic, by Chief Items—concluded.						
1	Nickel	lb.	–	–	5,352,043	9,537,558	23,959,841
		$	–	–	240,499	958,365	2,166,936
2	Coal	ton	318,287	420,055	833,684	1,888,538	1,820,511
		$	662,451	1,123,091	2,916,465	5,307,060	4,643,198
3	Asbestos	ton	–	–	7,022	26,715	57,075
		$	–	–	513,909	864,573	1,578,137
4	Wood-pulp	cwt.	–	–	–	–	–
		$	–	–	280,619	1,937,207	3,478,150
5	Newsprint paper	cwt.	–	–	–	–	–
		$	–	–	–	–	–
	Exports, Domestic, by Classes—						
6	Vegetable products (except chemicals, fibres and wood).	$	–	–	13,742,557	25,541,567	55,828,252
7	Animals and their products (except chemicals and fibres)	$	–	–	36,399,140	68,465,332	84,570,644
8	Fibres, textiles and textile products	$	–	–	872,628	1,880,539	2,602,903
9	Wood, wood products and paper	$	–	–	25,351,085	33,099,915	45,716,762
10	Iron and its products	$	–	–	556,527	3,778,897	4,705,296
11	Non-ferrous metals and their products	$	–	–	1,618,955	33,395,096	28,455,786
12	Non-metallic minerals and their products (except chemicals)	$	–	–	3,988,584	7,356,444	7,817,475
13	Chemicals and allied products.	$	–	–	851,211	791,855	1,784,800
14	All other commodities	$	–	–	5,291,051	3,121,741	4,002,038
	Totals, Exports, Domestic.	$	57,630,024	83,944,701	88,671,738	177,431,386	235,483,956
	Imports for Consumption—						
15	Vegetable products (except chemicals, fibres and wood).	$	–	–	24,212,140	38,036,146	50,307,368
16	Animals and their products (except chemicals and fibres)	$	–	–	8,080,862	14,022,896	23,616,835
17	Fibres, textiles and textile products	$	–	–	28,670,141	37,284,752	59,292,868
18	Wood, wood products and paper	$	–	–	5,203,490	8,196,901	14,341,947
19	Iron and its products	$	–	–	15,142,615	29,955,936	49,436,840
20	Non-ferrous metals and their products	$	–	–	3,810,626	7,167,318	17,533,430
21	Non-metallic minerals and their products (except chemicals).	$	–	–	14,139,024	21,255,403	33,757,284
22	Chemicals and allied products.	$	–	–	3,697,810	5,684,999	8,269,169
23	All other commodities	$	–	–	8,577,246	16,326,568	27,184,539
	Totals, Imports	$	84,214,388	90,488,329	111,533,954	177,930,919	283,740,280
	Steam Railways—						
24	Miles in operation	No.	2,695	7,331	13,838	18,140	21,423
25	Capital	$	257,035,188[2]	284,419,293	632,061,440	816,110,837	1,065,881,629
26	Passengers	No.	5,190,416[3]	6,943,671	13,222,568	18,385,722	27,989,782
27	Freight	ton	5,670,836[3]	12,065,323	21,753,021	36,999,371	57,966,713
28	Earnings	$	19,470,539[3]	27,987,509	48,192,099	72,898,749	125,322,865
29	Expenses	$	15,775,532[3]	20,121,418	34,960,449	50,368,726	87,129,434
	Electric Railways—						
30	Miles in operation	No.	–	–	–	553	814
31	Capital	$	–	–	–	–	–
32	Passengers	No.	–	–	–	120,934,656	237,655,074
33	Freight	ton	–	–	–	287,926	506,024
34	Earnings	$	–	–	–	5,768,283	10,966,871
35	Expenses	$	–	–	–	3,435,162	6,675,037
	Road Transportation—						
36	Highways, total mileage		–	–	–	–	–
37	Capital expenditure on	$	–	–	–	–	–
38	Motor vehicles registered	No.	–	–	–	–	1,447
39	Total provincial revenue from licences and operation	$	–	–	–	–	–
	Canals—						
40	Passengers carried	No.	100,377	118,136	146,336	190,428	256,500
41	Freight	ton	3,955,621	2,853,230	2,902,526	5,665,259	10,523,185

---

[1] Figures for 1938 are subject to revision. [2] 1876. [3] 1875. [4] Duplication eliminated.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1936.	1937.	1938.[1]	
34,767,523	70,443,000	47,018,300	71,081,400	81,929,300	160,925,200	179,036,100	227,087,900	1
3,842,332	7,714,769	9,405,291	12,829,244	18,246,375	41,644,380	45,882,184	61,918,600	
2,315,171	1,971,124	2,277,202	753,842	534,710	423,484	408,157	335,715	2
6,014,095	6,032,765	16,501,478	4,083,713	2,896,837	1,941,942	1,755,548	1,408,670	
69,829	88,833	191,299	269,652	219,541	218,098	320,987	360,978	3
2,076,477	2,962,010	12,633,389	9,920,900	7,719,974	7,611,844	10,569,302	13,721,394	
6,588,655	8,144,019	14,363,006	19,846,381	13,862,122	13,722,878	15,792,020	15,739,081	4
5,715,532	10,376,548	71,552,037	49,909,870	35,061,689	28,103,970	33,210,237	39,960,178	
–	9,264,080	15,112,586	29,537,366	44,848,479	53,261,626	62,899,709	63,815,792	5
3,092,437	17,974,292	78,922,137	102,238,568	127,352,706	90,761,379	110,176,448	120,007,550	
84,368,425	257,019,215	482,140,444	606,058,672	292,280,037	242,861,877	346,450,628	235,324,412	6
69,693,263	138,375,083	188,359,937	190,975,417	83,714,772	100,932,110	133,940,776	136,112,957	7
1,818,931	15,097,691	18,783,884	8,940,046	6,504,182	10,273,697	12,830,212	14,225,183	8
56,334,695	83,116,282	284,561,478	278,674,960	230,604,474	181,831,743	223,918,476	253,434,860	9
9,884,346	66,127,099	76,500,741	74,735,077	38,937,661	52,368,057	53,173,175	69,744,157	10
34,000,996	66,036,542	45,939,377	102,688,626	95,652,063	212,547,372	230,152,314	292,452,554	11
10,038,493	12,096,973	40,345,345	24,712,584	21,107,780	19,083,643	26,081,028	29,342,764	12
3,088,840	15,961,226	20,142,826	17,354,389	12,825,852	16,018,391	19,237,697	20,926,267	13
5,088,564	87,780,527	32,389,669	16,428,376	18,115,846	13,113,527	15,397,600	18,665,455	14
274,316,553	741,610,638	1,189,163,701	1,320,568,147	799,742,667	849,030,417	1,061,181,906	1,070,228,609	
79,214,041	95,421,161	259,431,110	203,417,431	177,597,464	110,342,532	131,400,217	146,335,406	15
30,671,908	38,657,514	61,722,390	49,185,558	45,995,756	24,314,220	27,863,224	30,399,795	16
87,916,282	96,191,485	243,608,342	184,761,831	130,717,022	89,814,164	104,811,304	108,932,093	17
26,851,936	18,277,420	57,449,384	40,403,096	46,073,343	23,271,631	28,927,720	34,221,181	18
91,968,180	92,065,895	245,625,703	181,196,800	192,614,200	114,253,715	150,239,139	209,236,711	19
27,579,572	29,431,592	55,651,319	47,692,985	61,899,298	33,685,919	37,037,954	47,063,972	20
53,430,475	53,490,284	206,095,113	139,033,940	153,578,658	105,421,236	116,948,261	136,662,502	21
12,471,730	19,217,505	37,887,449	28,404,276	35,650,772	29,919,921	33,105,448	36,890,149	22
42,620,479	65,448,278	72,688,072	53,232,815	62,486,182	31,695,725	41,542,299	49,328,109	23
452,724,603	508,201,134	1,240,158,882	927,328,732	906,612,695	562,719,063	671,875,566	799,069,918	
25,400	36,985	39,192	40,350	42,280	42,552	42,727	–	24
1,528,689,201	1,893,125,774	2,164,687,636	3,506,758,047	4,232,022,088	4,487,605,510	3,374,070,150	–	25
37,097,718	43,503,459	46,793,251	42,686,166	26,396,812	20,497,616	22,038,709	–	26
79,884,282	89,237,156[4]	83,730,829[4]	105,221,906[4]	74,129,694[4]	75,846,566[4]	82,220,374[4]	–	27
188,733,494	261,888,654	458,008,891	493,599,754	358,549,382	334,768,557	355,103,271	–	28
131,034,785	180,542,259	422,581,205	389,503,452	321,025,588	283,345,968	300,652,548	–	29
1,224	1,674	1,680	1,677	1,379	1,247	1,222	–	30
111,532,347	154,895,584	177,187,436	215,808,520	215,818,096	205,062,353	205,772,809	–	31
426,296,792	580,094,167	719,305,441	748,710,836	720,468,361	614,890,897	631,894,662	–	32
1,228,362	1,936,674	2,282,292	3,489,183	1,977,441	2,265,023	2,612,928	–	33
20,356,952	27,416,285	44,536,832	51,723,199	49,088,310	41,391,927	42,991,444	–	34
12,096,134	18,099,906	35,945,316	36,453,709	35,367,068	28,807,311	29,545,641	–	35
–	–	–	378,269	378,094	410,448	559,040	–	36
–	–	–	–	66,250,229	34,966,916	69,465,154	–	37
21,783	128,328	464,805	832,268	1,200,668	1,240,124	1,319,702	–	38
–	–	–	21,795,184	42,231,027	61,026,358	64,367,852	–	39
304,904	263,648	230,129	197,561	126,633	59,855	67,334	50,140	40
38,030,353	23,583,491	9,407,021	13,477,663	16,189,074	21,468,816	23,351,000	24,640,501	41

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Shipping—						
1	Vessels on the registry........	No.	–	7,394	7,015	6,697	7,516
		ton	–	1,310,896	1,005,475	666,276	663,415
	Sea-Going—						
2	Entered....................	ton	2,521,573	4,032,946	5,273,935	7,514,732	8,895,353
3	Cleared....................	"	2,594,460	4,071,391	5,421,261	7,028,330	7,948,076
4	Totals....................	"	5,116,033	8,104,337	10,695,196	14,543,062	16,843,429
	Inland International—						
5	Entered....................	ton	4,055,198	2,934,503	4,098,434	5,720,575	9,352,653
6	Cleared....................	"	3,954,797	2,763,592	4,009,018	5,766,171	8,536,090
7	Totals....................	"	8,009,995	5,698,095	8,107,452	11,486,746	17,888,743
	Coastwise—						
8	Entered....................	ton	–	7,664,863	12,835,774	17,927,959	23,543,604
9	Cleared....................	"	–	7,451,903	12,150,356	16,516,837	22,780,458
10	Totals....................	"	–	15,116,766	25,986,130	34,444,796	46,324,062
	Air Transportation—						
11	Mileage flown.................	No.	–	–	–	–	–
12	Passenger miles...............	"	–	–	–	–	–
13	Freight carried...............	lb.	–	–	–	–	–
14	Mail carried..................	"	–	–	–	–	–
	Communications—						
15	Telegraphs, Govt. miles of line	No.	–	1,947	2,699	5,744	6,829
16	Telegraphs, other, miles of line	"	–	–	27,866	30,194	31,506
17	Telephones....................	No.	–	–	–	63,192	–
18	Telephones, employees........	"	–	–	–	–	–
	Radio—						
19	Receiving sets..............	No.	–	–	–	–	–
	Post Office—						
20	Revenue......................	$	803,637	1,344,970	2,515,824	3,421,192	5,933,342
21	Expenditure..................	$	994,876	1,876,658	3,161,676	3,837,376	4,921,577
22	Money orders issued..........	$	4,546,434	7,725,212	12,478,178	17,956,258	37,355,673
	Dominion Finance—						
23	Customs revenue..............	$	11,841,105	18,406,092	23,305,218	28,293,930	46,053,377
24	Excise revenue...............	$	4,295,945	5,343,022	6,914,850	10,318,266	14,010,220
25	War tax revenue..............	$	–	–	–	–	–
26	Income tax................	$	–	–	–	–	–
27	Sales tax.................	$	–	–	–	–	–
28	Total receipts from taxation...	$	16,320,369	23,942,139	30,220,068	38,612,196	60,063,597
29	Per capita receipts from taxes.	$	4·42	5·54	6·25	7·19	9·69
30	Total revenue................	$	19,335,561	29,635,298	38,579,311	52,514,701	80,139,360
31	Revenue per capita...........	$	5·24	6·85	7·98	9·78	12·93
32	Total expenditure............	$	19,293,478	33,796,643	40,793,208	57,982,866	83,277,642
33	Expenditure per capita........	$	5·23	7·82	8·44	10·79	13·44
34	Gross debt...................	$	115,492,683	199,861,537	289,899,230	354,732,433	392,269,680
35	Assets.......................	$	37,786,165	44,465,757	52,090,199	86,252,429	125,226,703
36	Net debt..................	$	77,706,518	155,395,780	237,809,031	268,480,004	267,042,977
	Provincial Finance—						
37	Revenue, ordinary, totals.....	$	5,518,946	7,858,698	10,693,815	14,074,991	23,027,122
38	Expenditure, ordinary, totals.	$	4,935,008	8,119,701	11,628,353	14,146,059	21,169,868
	Note Circulation—						
39	Bank notes...................	$	20,914,637	28,516,692	33,061,042	50,601,205	70,638,870
40	Dom. or Bank of Canada notes[7]	$	7,244,341	14,539,795	16,176,316	27,898,509	49,941,426
	Chartered Banks—						
41	Capital, paid-up..............	$	37,095,340	59,534,977	60,700,697	67,035,615	91,035,604
42	Assets.......................	$	125,273,631	200,613,879	269,307,032	531,829,324	878,512.076
43	Liabilities to the public.......	$	80,250,974	127,176,249	187,332,325	420,003,743	713,790,553
44	Deposits payable on demand..	$	–	–	–	95,169,631	165,144,569
45	Deposits payable after notice..	$	–	–	–	221,624,664	381,778,705
46	Totals, Deposits[7],[8]........	$	56,287,391	94,346,481	148,396,968	349,573,327	605,968,513
	Savings Banks—						
47	Deposits in Post Office........	$	2,497,260	6,208,227	21,738,648	39,950,813	45,736,488
48	Deposits in Government banks	$	2,072,037	9,628,445	17,661,378	16,098,146	16,174,134
49	Deposits in special banks......	$	5,766,712	7,685,888	10,982,232	19,125,097	27,399,194
	Loan Companies (Dominion)—						
56	Assets........................	$	8,392,464	73,906,638	125,041,146	158,523,307	232,076,447
51	Liabilities....................	$	8,392,958	71,965,017	123,915,704	158,523,307	232,076,447

---

[1] Figures for 1938 are subject to revision. [2] Revised since the publication of the 1938 Year Book. [3] Excluding United States lines of Canadian National Telegraphs. [4] As at June 30. [5] Excluding employees on rural lines in Saskatchewan. [6] Active assets only. [7] As at June 30

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

1911.	1916.	1921.	1926.	1931.	1936.	1937.	1938.[1]	
8,088	8,659	7,482	8,193	8,966	9,373	8,910	10,127	1
770,446	943,131	1,223,973	1,348,935	1,484,423	1,367,071	1,338,723	1,274,163	
11,919,339	12,616,927	12,516,503	22,837,720	28,064,762	28,895,751	31,145,065	31,421,775	2
10,377,847	12,210,723	12,400,226	22,817,276	26,535,387	29,156,876	31,802,946	31,402,043	3
22,297,186	24,827,650	24,916,729	45,654,996	54,600,149	58,052,627	62,948,011	62,823,818	4
13,286,102	16,486,778	14,828,454	14,117,099	17,769,690	14,472,022	15,564,121	14,181,280	5
11,846,257	16,406,670	14,903,447	15,474,732	18,542,037	14,998,858	16,074,614	14,364,168	6
25,132,359	32,893,448	29,731,901	29,591,831	36,311,727	29,470,880	31,638,735	28,545,448	7
34,280,669	35,624,074	28,567,545	41,770,480	47,134,652	42,979,361	45,973,830	44,471,834	8
32,347,265	33,085,350	27,773,668	41,117,175	47,540,555	41,815,616	45,447,342	44,259,779	9
66,627,934	68,709,424	56,341,213	82,887,655	94,675,207	84,794,977	91,421,172	88,731,613	10
–	–	294,449	393,103	7,046,276	7,803,942[2]	10,755,524	–	11
–	–	–	631,715	4,073,552	12,055,684[2]	17,695,591	–	12
–	–	79,850	724,721	2,372,467	25,387,719	26,279,156	–	13
–	–	–	3,960	470,461	1,161,069[2]	1,450,473	–	14
8,446	10,699	11,207	10,722	9,300	8,893	8,929	–	15
33,905	38,552	41,577	42,239[3]	43,928	44,014	44,072	–	16
302.759[4]	548,421[4]	902,090	1,201,008	1,364,200	1,266,228	1,322,794	–	17
10,425[4,5]	15,247[4,5]	19,943[5]	23,083[5]	23,825[5]	17,775[5]	18,413[5]	–	18
–	–	–	134,486	523,100	862,109	1,038,500	1,104,207	19
9,146,952	18,858,410	26,331,119	31,024,464	30,416,106	32,507,888	34,274,552	35,546,161	20
7,954,223	16,009,139	24,661,262	30,499,686	36,292,603	30,100,102	30,538,575	32,296,805	21
70,614,862	94,469,871	173,523,322	177,840,231	167,749,651	121,810,839	133,155,222	144,445,972	22
71,838,089	98,617,695	163,266,804	127,355,144	131,208,955	74,004,560	83,771,091	93,455,750	23
16,869,837	22,428,492	37,118,367	42,923,549	57,746,808	44,409,797	45,956,857	52,037,333	24
–	3,620,782	168,385,327	157,296,320	107,320,633	197,484,627	256,822,921	303,157,977	25
–	–	46,381,824	55,571,962	71,048,022	82,709,803	102,365,242	120,365,531	26
–	–	38,114,539	74,025,093	20,783,944	77,551,974	112,832,259	138,054,536	27
88,707,926	124,666,969	368,770,498	327,575,013	296,276,396	317,311,809	386,550,869	448,651,061	28
12·31	15·58	41·96	34·66	28·55	28·77	34·76	40·03	29
117,780,409	172,147,838	436,292,185	382,893,009	356,160,876	372,595,996	454,153,747	516,692,749	30
16·34	21·52	49·64	40·52	34·32	33·79	40·84	46·10	31
122,861,250	339,702,502	528,302,513	355,186,423	440,008,855	532,585,555	532,005,432	534,408,118	32
17·04	42·46	60·11	37·59	42·41	48·29	47·84	47·68	33
474,941,487	936,987,802	2,902,482,117	2,768,779,184	2,610,265,698	3,431,944,027	3,542,521,139	3,540,237,614	34
134,899,435	321,831,631	561,603,133[6]	379,048,085[6]	348,653,762[6]	425,843,509[6]	458,568,937[6]	438,570,044[6]	35
340,042,052	615,156,171	2,340,878,984	2,389,731,099	2,261,611,937	3,006,100,517	3,083,952,202	3,101,667,570	36
40,706,948	50,015,795	102,030,458	146,450,904	179,143,480	232,616,182	268,497,670	–	37
38,144,511	53,826,219	102,569,515	144,183,178	190,754,202	248,141,808	253,443,737	–	38
89,982,223	126,691,913	194,621,710	168,885,995	141,969,350	119,507,306	110,259,134	99,870,493	39
99,921,354	176,816,006	271,531,162	190,004,824	153,079,362	105,275,223	141,053,457	161,137,059	40
103,009,256	113,175,353	129,096,339	116,638,254	144,674,853	145,500,000	145,500,000	145,500,000	41
1,303,131,260	1,839,286,709	2,841,782,079	2,864,019,213	3,066,018,472	3,144,506,755	3,317,087,132	3,348,708,580	42
1,097,661,393	1,596,905,337	2,556,454,190	2,604,601,786	2,741,554,219	2,855,622,232	3,025,721,653	3,056,684,905	43
304,801,755	428,717,781	551,914,643	553,322,935	578,604,394	618,340,561	691,319,545	690,485,877	44
568,976,209	780,842,383	1,289,347,063	1,340,559,021	1,437,976,749	1,518,216,945	1,573,654,555	1,630,481,857	45
980,433,788	1,418,035,429	2,264,586,736	2,277,192,043	2,422,834,828	2,614,895,597	2,775,530,413	2,823,686,934	46
43,330,579	40,008,418	29,010,619	24,035,669	24,750,227	22,047,287	21,879,593	22,587,233	47
14,673,752	13,519,855	10,150,189	8,794,870	[9]	[9]	[9]	[9]	48
34,770,386	40,405,037	58,576,775	67,241,344	69,820,422	69,665,415	73,450,133	77,260,433	49
389,701,988	70,872,297	96,698,810	120,321,095	147,094,183	137,210,511	136,262,516	–	50
389,701,988	70,872,297	95,281,122	119,425,417	146,046,087	137,199,814	136,250,000	–	51

---

from 1871 to 1906. Monthly averages from 1911 to 1938. [8] Including amounts deposited elsewhere than in Canada from 1901. [9] Included in Post Office Savings Banks.

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—continued.

	Item.		1871.	1881.	1891.	1901.	1906.
	Small Loans Companies (Dominion)—						
1	Assets	$	–	–	–	–	–
2	Liabilities	$	–	–	–	–	–
	Loan Companies (Provincial)—						
3	Assets	$	–	–	–	–	–
4	Liabilities	$	–	–	–	–	–
	Trust Companies (Dominion)—						
	ASSETS—						
5	Company funds	$	[4]	[4]	[4]	[4]	[4]
6	Guaranteed funds	$	[4]	[4]	[4]	[4]	[4]
	LIABILITIES—						
7	Company funds	$	[4]	[4]	[4]	[4]	[4]
8	Guaranteed funds	$	[4]	[4]	[4]	[4]	[4]
9	ESTATES, TRUST AND AGENCY FUNDS	$	[4]	[4]	[4]	[4]	[4]
	Trust Companies (Provincial)—[5]						
	ASSETS—						
10	Company funds (par value)	$	–	–	–	–	–
11	Guaranteed funds (par value)	$	–	–	–	–	–
12	ESTATES, TRUSTS AND AGENCY FUNDS	$	–	–	–	–	–
	Dominion Fire Insurance—						
13	Amounts at risk, Dec. 31	$	228,453,784	462,210,968	759,602,191	1,038,687,619	1,443,902,244
14	Premium income for each year	$	2,321,716	3,827,116	6,168,716	9,650,348	14,687,963
15	Losses paid during each year	$	1,549,199	3,169,824	3,905,697	6,774,956	6,584,291
	Provincial Fire Insurance—						
16	Amounts at risk, Dec. 31	$	–	–	–	–	–
17	Premium income for each year	$	–	–	–	–	–
18	Losses paid during each year	$	–	–	–	–	–
	Dominion Life Insurance—[6]						
19	Amounts at risk, Dec. 31	$	45,825,935	103,290,932	261,475,229	463,769,034	656,260,900
20	Premium income for each year	$	1,852,974	3,094,689	8,417,702	15,189,854	22,364.456
21	Net amounts of policies become claims during each year	$	–	–	–	7,182,358	8,881,776
	Provincial Life Insurance—						
22	Amounts at risk, Dec. 31	$	–	–	–	–	–
23	Premium income for year	$	–	–	–	–	–
24	Net amounts of premiums become claims during each year	$	–	–	–	–	–
	Business Transacted—						
25	Bank clearings	$'000	–	–	580,644	1,871,062	3,950,701
26	Bank debits	"	–	–	–	–	–
27	**Commercial Failures**	No.	–	–	1,861	1,341	1,184
28	Assets	$	–	–	–	7,686,823	6,499,052
29	Liabilities	$	–	–	16,723,939	10,811,671	9,085,773
	Education (Provincially-Controlled Schools only)—						
30	Enrolment	No.	803,000	891,000	993,000	1,092,633	1,173,009
31	Averages of daily attendance	"	–	–	–	669,000	743,299
32	Teachers	"	13,559	18,016	23,718	27,126	32,250
33	Public expenditures on	$	–	–	–	11,044,925	16,368,244
	Criminal Statistics—[9,10]						
34	Convictions, indictable offences	No.	–	3,509[11]	3,974	5,638	8,092
35	Convictions, non-indictable offences	"	–	30,365[11]	33,643	36,510	62,811
	Hospitals—						
36	Other than mental	No.	–	–	–	–	–
37	Patients under treatment[12]	"	–	–	–	–	–
38	Bed capacity	"	–	–	–	–	–
39	Mental	"	–	–	–	–	–
40	Patients under treatment[12]	"	–	–	–	–	–
41	Receipts	$	–	–	–	–	–
42	Expenditures	$	–	–	–	–	–

---

[1] Figures for 1938 are subject to revision.

[2] 1928 figures; first year available.

[3] 1922 figures; first year provincial figures made available by the Department of Insurance.

[4] Previous to 1920 when the Dominion Department of Insurance took over the administration of the legislation concerning loan companies, the figures are not comparable. They are shown, however, at pp. xl and xli of the 1938 Year Book.

[5] Compiled from data supplied voluntarily to the Superintendent of Insurance by

STATISTICAL SUMMARY OF THE PROGRESS OF CANADA—concluded.

1911.	1916.	1921.	1926.	1931.	1936.	1937.	1938.[1]	
–	–	–	159,239[2]	827,373	4,392,390	5,174,552	–	1
–	–	–	157,453[2]	823,120	4,361,126	5,137,760	–	2
–	–	86,144,153[3]	84,402,833	65,728,238	58,909,744	56,912,506	–	3
–	–	87,385,807[3]	83,198,515	66,387,987	58,762,522	57,155,191	–	4
[4]	[4]	10,237,930	13,195,277	15,459,347	16,374,558	17,408,307	–	5
[4]	[4]	8,774,185	17,979,412	25,718,219	35,456,607	35,784,676	–	6
[4]	[4]	9,907,331	12,954,225	15,066,431	15,878,061	16,570,649	–	7
[4]	[4]	8,549,642	17,979,412	25,718,221	35,456,607	35,784,676	–	8
[4]	[4]	79,252,639	139,777,235	215,698,469	226,024,454	228,155,009	–	9
–	–	31,418,403[3]	33,172,710	66,338,148	63,770,447	63,435,443	–	10
–	–	32,885,302[3]	52,321,267	125,829,165	121,986,843	123,492,136	–	11
–	–	629,953,917[3]	733,149,544	1,961,948,175	2,311,906,898	2,330,701,359	–	12
2,279,868,346	3,720,058,236	6,020,513,832	8,051,444,136	9,544,641,293	9,248,273,260	9,773,324,476[13]	9,963,691,423	13
20,575,255	27,783,852	47,312,564	52,595,923	50,342,669	40,218,296	42,498,127[13]	42,446,471	14
10,936,948	15,114,063	27,572,560	25,705,975	29,938,409	14,072,237	14,821,536[13]	17,357,156	15
–	849,915,678	1,269,764,435	1,286,255,476	1,341,184,333	1,184,852,046	976,220,698	–	16
–	3,902,504	5,545,549	6,068,701	7,185,066	5,002,603	3,643,190	–	17
–	2,188,438	3,544,820	3,062,846	4,985,605	2,190,624	1,834,691	–	18
950,220,771	1,422,179,632	2,934,843,848	4,610,196,334	6,622,267,793	6,403,037,477	6,541,625,046[13]	6,630,531,401	19
31,619,626	48,093,105	98,864,371	159,872,965	225,100,571	200,541,265	199,095,527[13]	198,648,864	20
11,434,901	20,259,534	24,014,465	34,642,526	54,410,589	58,086,634	62,623,692[13]	67,122,522	21
–	348,097,229	222,871,178	147,821,972	202,094,301	130,044,228	125,982,716	–	22
–	5,311,003	4,389,008	3,991,126	5,178,615	3,025,124	3,332,991	–	23
–	4,592,420	2,812,077	1,741,735	2,603,453	2,195,537	2,095,626	–	24
7,346,382	10,315,854	16,811,287	17,715,090	16,827,603	19,202,527	18,850,385	17,263,574	25
–	–	27,157,474[7]	30,358,034	31,586,468	35,928,607	35,166,061	30,924,363	26
1,332	1,685[8]	2,451[8]	2,196[8]	2,563[8]	1,238	952	1,049	27
9,964,404	19,670,542[8]	57,158,397[8]	25,668,509[8]	37,613,810[8]	7,060,000	4,813,000	7,186,000	28
13,491,196	25,069,534[8]	73,299,111[8]	37,082,882[8]	52,987,554[8]	11,314,000	7,426,000	11,036,000	29
1,361,205	1,626,144	1,880,805	2,085,473	2,264,106	2,195,823	–	–	30
870,532	1,118,522	1,349,256	1,564,830	1,801,955	1,832,257	–	–	31
40,516	50,307	56,607	63,840	71,246	71,701	–	–	32
37,971,374	57,362,734	112,976,543	122,701,259	144,748,823	114,685,037	–	–	33
12,627	19,160	19,396	22,538	36,853	41,029	42,372	–	34
100,633	104,631	157,777	172,654	330,235	379,946	422,704	–	35
–	–	–	–	822	903	895	–	36
–	–	–	–	688,456	877,945	915,776	–	37
–	–	–	–	55,285	66,486	70,036	–	38
–	–	–	–	56	57	57	–	39
–	–	–	–	40,485	53,326	54,855	–	40
–	–	–	–	–	14,300,952	14,051,528	–	41
–	–	–	–	–	14,222,138	14,017,403	–	42

---

provincial companies, but estimated to cover about 90 p.c. of all provincial business. The figures include all the large and most of the small provincial companies. [6] Not including fraternal insurance. [7] Figures are for 1924, the first year for which bank debits are available. [8] Includes Newfoundland. [9] Year ended Sept. 30. [10] Revised since the publication of the 1938 Year Book. [11] 1886 figures; first year available. [12] During the respective fiscal years. [13] Corrected figure, published since Chapter XXXIII went to press.

CHAPTER I.—PHYSIOGRAPHY.

PART I.—GEOGRAPHICAL FEATURES.*

Situation.—The Dominion of Canada comprises the whole northern part of the North American continent with its islands, except the United States territory of Alaska and the territory of Newfoundland (which includes Labrador). It takes in the whole Arctic archipelago between Davis strait and the connecting waters northward to the 60th meridian on the east and the 141st meridian on the west.

The Dominion is bounded on the west by the Pacific ocean and Alaska; on the south by the United States; on the east by the Atlantic ocean, the waters between Newfoundland and the gulf of the St. Lawrence, Labrador, Davis strait, and the dividing waters between the Danish territory of Greenland and Ellesmere island; northward it extends to the North Pole.

The southernmost point is Middle island in lake Erie, in north latitude 41° 41′, and from east to west Canada extends from about west longitude 57° at Belle Isle strait to west longitude 141°, the boundary of Alaska. Canadian territory thus extends over 84° of longitude and 48° of latitude.

Area.—The area of the Dominion is 3,694,863 square miles, a figure which may be compared with that of 3,738,395 square miles for the United States and its dependent territories, 3,776,700 the total area of Europe, 2,974,581 the area of Australia, 3,275,510 the area of Brazil, 1,805,252 the area of India, 121,633 the area of the British Isles. Canada's area is over 27 p.c. of the total area of the British Empire as it is shown on p. 165 of the 1934-35 Year Book.

Political Subdivisions.—Canada is divided from east to west into the following provinces: the Maritime Provinces of Nova Scotia, Prince Edward Island, and New Brunswick, all three comparatively small in area; Quebec, covering a strip south of the St. Lawrence river and the whole territory north of the St. Lawrence river and east of the Ottawa river to Hudson strait, except the Coast of Labrador; Ontario, extending northward from the Great Lakes to Hudson bay; Manitoba, Saskatchewan, and Alberta, the provinces of the interior continental plain, extending from the boundary of the United States to 60° north latitude; and British Columbia, the province of the Cordilleran region, also extending from the International Boundary to 60°N. North of the area included in the provinces the country is divided into the Yukon Territory to the west, abutting on Alaska, and the Northwest Territories. The latter is subdivided into three provisional districts: that of Mackenzie comprises the mainland between Yukon and the meridian of longitude 102°W.; the district of Keewatin comprises in general the remainder of the mainland between the district of Mackenzie and Hudson bay, and includes the off-shore islands in Hudson and James bays; the district of Franklin comprises in general the Arctic archipelago.

Prince Edward Island.—This, the smallest province of the Dominion, lies just off the coast east of New Brunswick and north of Nova Scotia; it is separated from both provinces by Northumberland strait from ten to twenty-five miles wide. It is about 120 miles in length and, with an average width of 20 miles, covers an area of 2,184 square miles, approximately 200 square miles more than the State of Delaware. The island is almost trisected by the deep indentations of Malpeque bay north of Summerside and by the mouth of the Hillsborough river at Charlottetown, which nearly meets Tracadie bay on the north side. Its rich, red soil and red sandstone formations are distinctive features, and no point on the island attains a greater altitude than about 450 feet above sea-level. Its climate, tempered by the surrounding waters of the gulf and yet free from the rigours of Atlantic storms, combined with a fertile soil and sheltered harbours, offers great inducements to the pursuits of agriculture and fishing. The province is noted for its relative predominance in the fox-farming industry, its lobster canneries, its oyster beds, and its production of seed potatoes.

---

*Revised by F. H. Peters, Surveyor General and Chief, Hydrographic Service, Department of Mines and Resources, Ottawa.

Nova Scotia.—The province of Nova Scotia is 381 miles in length by from 50 to 105 miles in width, a long, narrow strip of land lying parallel to the Maine and New Brunswick coasts and joined to the latter province by the isthmus of Chignecto, which is 15 miles in width. It includes to the north the island of Cape Breton, which is separated from the mainland by the narrow strait of Canso. The total area of the province is 21,068 square miles, a little over 2,000 square miles less than the combined areas of Belgium and Holland. Cape Breton island, south of the main entrance to the gulf of St. Lawrence and sheltering Prince Edward island from the Atlantic, is roughly 100 miles in length with an extreme breadth of 87 miles. Its area of 3,970 square miles encloses the salt-water lakes of Bras d'Or, connected with the sea at the north by two natural channels and at the south by the St. Peters ship canal. The ridge of low, mountainous country running through the centre of the Nova Scotia mainland, the highest altitude of which is less than 1,500 feet, divides it roughly into two slopes. That facing the Atlantic is generally rocky and open to the sweep of Atlantic storms, but the other, facing the bay of Fundy and Northumberland strait, consists for the most part of fertile plains and river valleys noted for general farming and for fruit-farming districts which produce the famous Nova Scotian apples. The Atlantic coast is deeply indented with numerous excellent harbours, many of which provided splendid homes and refuges for the old sail fishing fleets. The province is still the home of an extensive fishing industry. The mineral resources of Nova Scotia were among the first in the Dominion to be exploited as some of its coal deposits outcropped on the sea-coast. These valuable coal measures make Nova Scotia still one of the chief coal-producing provinces of the Dominion. In addition, there are extensive areas of gold-bearing formations and valuable deposits of gypsum.

New Brunswick.—With a total area of 27,985 square miles, New Brunswick may be compared in size to Scotland with its area of 30,405 square miles. The province is very compact and in shape nearly rectangular, with its depth not greatly exceeding its width. The conformation is in general undulating and of low relief. In the southeastern half of the province the ground elevation does not generally exceed 500 feet above sea-level except for a narrow strip in the south which produces the highlands bordering the bay of Fundy east of Saint John. In the northwestern half the ground elevation is in general from 500 to 1,000 feet above sea-level and reaches its greatest elevation of about 2,690 feet in Northumberland county northeast of Grand Falls. The St. John, rising in the sister province of Quebec and the bordering State of Maine, is a river with many distinctive beauties, while its length of nearly 400 miles makes it quite noteworthy as to size. In the northeastern half of the province there are very extensive areas of Crown lands still carrying valuable stands of merchantable timber. The bay of Chaleur at the north, the gulf of St. Lawrence and Northumberland strait at the east, the bay of Fundy at the south, and Passamaquoddy bay at the southwest, provide the province with a very extensive sea-coast. To its southwest is a group of islands belonging to the province, the most important of which are Grand Manan, Campobello, and the West Isles. New Brunswick has been called the best watered country in the world; numerous rivers provide access to extensive lumbering areas in its interior and to many of the most attractive hunting and fishing resorts in the Dominion. While its forest resources are an important economic feature, extensive areas of rich agricultural lands are found in the river valleys and the broad plains near the coasts. The Minto coalfields, though production has been on a moderate scale for many years, have shown an expanding tendency recently and the province also produces a limited quantity of petroleum and natural gas.

Quebec.—Quebec might well be included among the Maritime Provinces, for with the St. Lawrence river, the gulf of St. Lawrence, the Atlantic, Hudson strait and bay, salt water washes the coasts of the province for a length of over 2,700 miles. Besides including a narrow strip of land between the St. Lawrence and the International and New Brunswick boundaries, Quebec extends northward from the St. Lawrence and Ottawa rivers to Labrador and Hudson strait, covering over 17° of latitude and an area of 594,534 square miles, about 38 p.c. of which lies south of the isotherm of 60° F. mean July temperature.* The combined area of France, Germany, and Spain is about 2,600 square miles less than the area of Quebec. The conformity of the surface of Quebec is that characteristic of the Precambrian rocks, being quite even in general but much diversified by minor hills and hollows. North of the St. Lawrence the land takes the form of a ridge, parallel to the river and rising from sea-level to the Height of Land at an elevation of from 1,000 to 3,000 feet and then descending gently again to the sea-level of Hudson bay to the northwest; but to the northeast the ridge carries its height to end abruptly in the high headlands of Labrador. South of the river, the area is comprised of the St. Lawrence Lowlands between Montreal and Quebec which, rising to the east, produce the highest known elevation in the province, *viz.*, 4,160 feet, that of Jacques Cartier peak of Tabletop mountain in the Gaspe peninsula. With the exception of the treeless zone extending somewhat south of Ungava bay, most of the province supports a valuable tree growth varying from the mixed forest in the southwest to the eastern and northern coniferous in the areas of higher latitude. Apart from its importance as the threshold of Canada and the Atlantic gateway through which ocean vessels must pass on their way to the interior of the continent, Quebec is also noted for its natural resources. The extensive timber limits of its northern areas form the basis for the great pulp and paper industry of this part of Canada. Its rivers, many of them as yet comparatively unknown, may be harnessed to supply about two-fifths of the electric power available in Canada. Its asbestos deposits have long been known for their quality and extent, while more recently there have been extensive developments of deposits of gold and copper in the western part of the province, with further discoveries extending the mineralized area into the Chibougamau district. These developments have brought the province up to third place in mineral production in Canada. The fisheries of the St. Lawrence river and gulf are well known. Agriculturally, the climate and soil of the upper St. Lawrence River valley and the plains of the Eastern Townships are eminently adapted to general farming operations.

Ontario.—The province of Ontario is the section of the Dominion contained between the great international lakes and Hudson bay and between the western boundary of Quebec and the eastern limits of Manitoba. Although generally regarded as an inland province, Ontario has a fresh-water shore line on the Great Lakes of more than 2,362 miles and on the north a salt-water shore line of about 680 miles with a tidal port at Moosonee at the southern end of James bay. The southernmost point of Ontario, which is also the southernmost point of the Dominion, is in north latitude 41° 41′—a little farther south than the northern boundary of the State of California—and its most northern, in north latitude 56° 50′. The total area comprised within its limits, of which about 82 p.c. lies south of the isotherm of 60° F. mean July temperature,* is 412,582 square miles, of which its fresh-water area of 49,300 square miles forms the unusually large proportion of 12 p.c. The province is over 17,000 square miles greater in area than are France and Germany (exclusive of Austria) together, and when compared with the States to the south, Ontario is found to be almost equal in extent to the combined areas of the six New England States, together with New York, New Jersey, Pennsylvania, Ohio, Indiana, Illinois, Michigan, and Wisconsin. Excepting in the southwestern part, the surface conformity of Ontario is influenced by the characteristics of the Precambrian rocks. In northern Ontario a large area with elevations of 1,000 feet or over adjoins the north shore of the Great Lakes and, going north a short distance over the Height of Land, the slope descends very gently to Hudson bay, which has a wide marginal strip less than 500 feet above sea-level. The highest point in Ontario is 2,120 feet, on the promontory at the northeastern corner of lake Superior. The whole province supports a valuable covering of trees, varying, from south to north, from the mixed forest to the eastern and northern coniferous. Many varieties of climate and soil are encountered, from the distinctively southern conditions found along the shores of lake Erie to the very different ones of Hudson and James bays. Ontario, of all the provinces, is the centre of the country's manufacturing industries, owing to its abundant water-power resources and its proximity to the coalfields of Pennsylvania, but the many resources of its rural districts are not on this account neglected. Mining is a very important industry in the wide-spread Precambrian area and, although the most important districts are Sudbury, Porcupine, and Kirkland Lake, profitable mining operations, principally of gold, are now being carried on from the Manitoba boundary eastward across northern Ontario and down into eastern Ontario. Petroleum and natural gas, salt, and gypsum are also produced on an important scale in the southwestern part of the province. Fruit farming in the Niagara district and general farming throughout the entire southern part of the province are carried on extensively under unusually favourable conditions, while timber, pulp, and furs are other important products of more northern parts.

---

*The isotherm of 60° F. mean July temperature is generally considered as the northern limit for the economic production of cereals.

Manitoba.—Manitoba, the most easterly of the Prairie Provinces, and also the oldest of them in point of settlement, includes the area between Ontario on the east and Saskatchewan on the west. Its southerly limit is the International Boundary, while its northerly boundary is the 60th parallel of latitude and Hudson bay, where its coast of over 400 miles includes the harbour and port of Churchill. The total area of Manitoba, of which about 56 p.c. lies south of the isotherm of 60° F. mean July temperature,* is 246,512 square miles—3,246 square miles greater than twice the total area of the British Isles. The conformity of the surface of Manitoba is quite even; commencing on the north with a strip bordering on Hudson bay—perhaps 100 miles wide and less than 500 feet in elevation—the surface rises gradually towards the west and south. The bulk of the province has an elevation of between 500 and 1,000 feet, and the greatest height of 2,727 feet is attained in Duck mountain, northwest of lake Dauphin. East and north of lake Winnipeg the Canadian Shield is found with its Precambrian rock formation, but the remainder of the province is overlain by very fertile soil of great depth. The treeless prairie belt extends into the southwest corner of the province, but the greater portion of the developed area is in the grove belt, characterized by groves of poplar interspersed with open prairie patches; to the north there are great areas of northern mixed forest, blending into the northern coniferous, which thin again to some treeless areas along the coast-line farther north. The province has been regarded as typically agricultural, its southern lands being specially adapted to this form of industry. Its northern districts, however, are of importance in the production of timber and furs and its numerous large lakes in the production of fresh-water fish, chiefly whitefish. About three-fifths of the area of this province is underlain by the Precambrian rocks which have been found so rich in minerals in northern Ontario and Quebec. Two large deposits of copper-gold-zinc ore have been developed, south of the Churchill river near the Manitoba-Saskatchewan boundary, while to the east and north of lake Winnipeg recent years have witnessed great activity in the prospecting and development of gold properties, a number of which are now producing. The province also possesses important water-power resources in the rivers of the Precambrian area.

---

* See footnote, p. 3.

Saskatchewan.—This central prairie province lies between Manitoba and Alberta; it extends from the International Boundary on the south to the 60th parallel of latitude, which divides it from the Northwest Territories. The area, of which about 89 p.c. lies south of the isotherm of 60° F. mean July temperature,* is 251,700 square miles, approximating that of Manitoba, and greater by 5,000 square miles than the combined areas of the British Isles and Norway. Approximately one-third of the total area, generally lying north of the Churchill river, is underlain by the Precambrian rocks which have been found so richly mineralized in other parts of Canada. The Flinflon copper-gold-zinc deposit on the Manitoba-Saskatchewan boundary is an evidence of economic mineralization in the east, while in the Lake Athabaska region of the northwest promising discoveries of gold have been made recently. The northern districts, abundantly watered by lakes and rivers, in addition to potential mineral wealth, are rich in timber resources while the southerly two-thirds of the province overlain by generally fertile soil of great depth includes a large portion of the famous western wheat fields. The larger part of the developed area in the south is comprised in the great treeless prairie belt, fringed to the north with a zone of poplar interspersed with open prairie, which gradually changes into the northern mixed forest covering all the northerly parts. Apart from the southern prairies, which are extraordinarily smooth, the surface topography is generally of low relief with a gradually rising slope towards the west. The bulk of the province has a general elevation of between 1,000 and 2,000 feet, with the maximum elevation of about 4,500 feet on the eastern point of the Cypress hills in the southwest corner. The climate in the southern parts is quite different from that of Eastern Canada, with less precipitation and perhaps more severe features than are encountered in many other parts of the country, but is nevertheless most favourable to plant growth, when sufficient moisture is available.

Alberta.—Lying between Saskatchewan on the east and the Rocky mountains and the 120th meridian on the west, and bounded on the north and south by the Northwest Territories and the United States, respectively, is the province of Alberta. Its area is slightly greater than that of Saskatchewan or Manitoba, comprising a total of 255,285 square miles, of which about 90 p.c. lies south of the isotherm of 60° F. mean July temperature.* The area of the province is over 8,600 square miles greater than the combined areas of the British Isles and Norway. Like Saskatchewan, the southern part of the province is comprised in the dry, treeless prairie belt, changing to the north into a zone of poplar interspersed with open prairie, which again gives way to the northern mixed forest covering the northerly parts. The

---

* See footnote, p. 3.

Precambrian rocks just touch Alberta at its northeast corner, so that, excepting the fringe of mountainous country on its western border, practically the whole of the province is overlain by arable soil of great depth. Alberta has two marked features: (1) the great valley of the Peace river, which has already resulted in the extension of settlement farther north than in any other part of Canada; and (2) the wonderful grazing lands in the foothills district, which, rising sharply on the west, commence the ascent which continues to the very peaks of the Rocky mountains. The southern half of the province, rising towards the west, lies at a general elevation of from 2,000 to 4,000 feet; but in the northern half the slope descends until elevations of well under 1,000 feet are reached at lake Athabaska in the northeast corner. Mount Columbia, with an elevation of 12,294 feet, is the highest point in the province. Alberta has the most extensive coal resources of any province of the Dominion and has also become the leading producer of petroleum and natural gas. Lumbering is important in the more mountainous western parts and in the north, but ranching is still pursued in the less populous sections. In the southern prairies there are considerable areas where the quantity and distribution of the natural precipitation makes permanent agriculture precarious and in these areas a number of large irrigation projects have been developed, taking their water supply from rivers rising in the mountains which form the western boundary of the province. The climate of Alberta is a particularly pleasant one, cooler in summer than more eastern parts of the country and tempered in winter by the "Chinook" winds.

British Columbia.—British Columbia, the most westerly province of the Dominion, comprises an area of 366,255 square miles, slightly more than three times the area of the British Isles. The predominant feature of the province is the parallel ranges of mountains which cover all of it except the northeast corner and produce a conformation characterized by high mountain ranges interspaced with valleys, many of which are extremely fertile, with climatic conditions well adapted to mixed agriculture or fruit growing. Apart from the smoother area in the northeast corner which extends up from the "Peace River Block" there is another notably large area of smoother terrain in the Stuart Lake district, traversed by the Canadian National railway running west from Fort George to Prince Rupert. The highest point in the province is mount Fairweather (15,287 feet). The shore line of the Pacific is deeply indented with many inlets ideal for harbourage and with wonderful scenic aspects. With two ocean ports served by transcontinental railways, British Columbia is well situated and equipped to carry on trade with the Orient, and its great stands of fir, spruce, and cedar timber constitute a natural resource of great value. The province includes many islands of the Pacific, notably the Queen Charlotte group and Vancouver island; the latter, with an area of about 12,408 square miles, is noted for its temperate climate and abundant natural resources. The wealth of the forest resources supports the lumbering and pulp and paper industries and puts British Columbia ahead of any other province in the production of lumber and timber. The province also excels in fishery products, chiefly on account of its catches of the famous Pacific salmon. The mineral resources are remarkable for their variety and wealth. The production of the metals, gold, copper, silver, lead, and zinc, has played an important role in the economic life of the province since its early days, while valuable coal deposits on Vancouver island, and at Crowsnest and Fernie in the interior, have been worked for many years. The boundaries of the province extend from Alberta on the east to the Pacific ocean and Alaska on the west, and from the International Boundary northward to Yukon.

Yukon Territory.—Yukon Territory, with an area of 207,076 square miles, is the most western part of Canada and its time is nine hours later than Greenwich. It extends northward from latitude 60° N., (the boundary of British Columbia) to the Arctic ocean. Longitude 141° W. is the western boundary between Yukon and Alaska. It is bounded on the east by the Northwest Territories.

The greater part of the Yukon Territory is mountainous although in the extreme north and southeast the relief is low. The mountainous part is divided into a number of ranges and a central plateau area, all of which exhibit a general northwest trend. The St. Elias mountains in the southwest are the highest mountains in Canada and, in mount Logan (19,850 feet elevation) contain the second highest peak in North America. The Coast mountains lie northeast of the St. Elias mountains and are followed by the Yukon plateau, which is bounded on the east and north by the Mackenzie mountains and their western spur, the Ogilvie range. The plateau covers most of the southern part of the territory and forms the central part of the basin of the Yukon river. It contains a number of isolated mountain ranges distributed over it. The higher levels of the plateau are of 4,000 to 5,000 feet elevation with the exception of the ranges whose peaks reach 6,000 to 8,000 feet. The Coast and Mackenzie mountains contain a few peaks of more than 8,000 feet elevation. On the east, Yukon is drained by the tributaries of the Mackenzie river to the Arctic ocean and on the southwest by the Alsek river to the Pacific ocean.

Western and central Yukon are drained by the Yukon river to Bering sea. Whitehorse, the head of navigation on Lewes river, the main tributary of the Yukon river, has an elevation of 2,081 feet; that of Dawson on the Yukon river is 1,038 feet. The plateau is isolated on three sides by the mountains through which there is no natural, easy route of access and on the northwest it is 1,100 miles by the Yukon river from the Bering sea. The discovery of rich deposits of alluvial gold led to the construction of a railway from tidewater at Skagway on the Alaskan coast over the Coast mountains by White pass to Whitehorse. The tributaries of the Yukon river within the plateau area form 1,250 miles of connected waterways navigable for stern-wheel steamboats. This waterway with the railway has made the plateau the most accessible area of the northern territories of Canada. Dawson is the capital, chief commercial, and placer-mining centre of the territory. Whitehorse ranks next in importance, being the junction of rail and water transport and the distributing centre. Mayo is the centre of the silver-lead mining industry. In recent years roads for use throughout the year have been built in the neighbourhoods of these three places. Aeroplanes are now an important means of travel. A chain of landing fields has been built along the chief air routes.

The chief industries are mining, fur trade, tourist traffic, and big-game hunting: mining is by far the most important. For over fifty years Yukon has been a producer of gold and in more recent years silver, lead, copper, and coal have also been mined in important quantities. A wide variety of other mineral resources have been discovered distributed throughout the territory promising greater importance for mining in future. The relatively warm and dry climate for such northern latitudes enjoyed by the plateau of southern Yukon enables a wide range of garden produce and hardy grains to be grown throughout its extent. The break-up of the ice in the lakes and rivers takes place in May and navigation opens in the fourth week of that month and closes in the latter part of October.

The Northwest Territories.—The Northwest Territories consists of the provisional districts of Mackenzie, Keewatin, and Franklin. It embraces all of Canada north of the 60th parallel of latitude and east of the Yukon Territory (including also the islands in Hudson and James bays and Hudson strait), except that portion of Quebec which extends north of the 60th parallel. Its area is 1,309,682 square miles, or nearly as large as the combined areas of Argentina and Chile in South America, or over twelve times the area of Great Britain and Northern Ireland.

Much of the area is still unexplored. The highest part of the mainland is in the Mackenzie mountains, where Keele peak has an elevation of 8,500 feet and elevations of 11,000 feet have been reported near the headwaters of the South Nahanni river. From the Mackenzie mountains the land drops to an elevation of less than 500 feet at the Mackenzie river, on the east side of which the Horn and Franklin mountains reach altitudes of about 2,000 feet. A large depression is formed by a trough-like valley in which Great Bear and Great Slave lakes are the principal topographical features. To the east of this the land rises to an elevation of 1,400 feet in the great interior plateau, which in turn gradually falls away to the beach-made plains on the west side of Hudson bay. There are some high mountains in the northeastern Arctic islands, particularly in northern Ellesmere island where the Shackleton Expedition of 1935 recorded an elevation of 10,000 feet.

Roughly speaking, about one-third of the mainland and all the Arctic islands are treeless. This is not due to inadequate summer temperature, but more likely to insufficient precipitation coupled with the extreme dryness of the air during winter. Some form of plant life is in evidence wherever there is soil. In the wooded areas there is little difficulty in securing forest products sufficient for the needs of the residents.

Photography from the air has done much to aid in mapping areas adjacent to the better-known transportation routes and the areas in which minerals have been discovered. The silver, radium, and copper deposits near the east end of Great Bear lake, and the gold discoveries in the Yellowknife area north and east of Great Slave lake are the most important mineral discoveries. Oil is being refined at the Imperial Oil Company's wells some 42 miles below Norman on the Mackenzie river. Coal has been reported at several points both on the mainland and in the Arctic archipelago.

Development of the resources of, and communications in, the Northwest Territories and Yukon are dealt with in Chapter XXVIII, Subsection 1 of Section 1.

Summary of Land and Water Areas.—The total land and fresh-water areas of the Dominion, together with their distribution by provinces and territories, are shown in Table 1.

1.—Land and Fresh-Water Areas of Canada, by Provinces and Territories, 1938.[1]

Note.—A classification of land area as agricultural, forested, or unproductive will be found under Part VI of this Chapter at p. 27.

Province or Territory.	Land.[2]	Fresh Water.[2]	Total.[2]	Per Cent of Total Area.
	sq. miles.	sq. miles.	sq. miles.	
Prince Edward Island	2,184	[3]	2,184	0·1
Nova Scotia	20,743	325	21,068	0·6
New Brunswick	27,473	512	27,985	0·8
Quebec	523,534	71,000	594,534	16·1
Ontario	363,282	49,300	412,582	11·1
Manitoba	219,723	26,789	246,512	6·7
Saskatchewan	237,975	13,725	251,700	6·8
Alberta	248,800	6,485	255,285	6·9
British Columbia	359,279	6,976	366,255	9·9
Yukon	205,346	1,730	207,076	5·6
Northwest Territories—				
Franklin	546,532	7,500	554,032	15·0
Keewatin	218,460	9,700	228,160	6·2
Mackenzie	493,225	34,265	527,490	14·2
Canada	**3,466,556**	**228,307**	**3,694,863**	**100·0**

[1] The salt-water areas of Canada are excluded. [2] Approximate. [3] Too small to be enumerated.

Section 1.—Orography.

The outstanding and predominant orographical feature in Canada is the great Cordilleran mountain system which, extending up from the south, parallels the coast of the Pacific ocean, and, continuing on, comprises the bulk of the United States territory of Alaska. Throughout Canada this mountain system has a width of about 400 miles and, covering about 530,000 square miles in area, includes nearly all of British Columbia and Yukon. This region is definitely the most rugged and elevated in the Dominion, many of the summits reaching heights of 10,000 feet with occasional peaks over 13,000 feet above sea-level. The principal named peaks exceeding 11,000 feet in elevation are given in Table 2. The main mountain ranges forming the system are the Coast mountains and the St. Elias mountains on the Pacific side, the Selkirks and the Rockies on the east side of the system to the south, and farther north on the east side the Stikine and the Mackenzie mountains. This great mountainous tract is a formidable barrier between the ocean and the interior of Western Canada; by precipitating a great part of the moisture out of the winds coming from the Pacific, it has a marked effect on the climate of the western country. On the west side, the Cordilleras are drained by mountain streams pitching swiftly down to the Pacific. The Yukon Territory is drained to the north by that remarkable river of the same name which runs through a wide valley over 1,700 miles long before reaching the Bering sea. On the east side of the mountains and their foothills, the land slopes gently away to the east and to the north.

2.—Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude.

NOTE.—The highest point on the mainland of Eastern Canada, with the exception of the Torngats in Labrador, peaks of which rise to about 5,500 feet, is Mount Jacques Cartier, a peak of Tabletop mountain in N. lat. 48°59′, W. long. 65°56′, Gaspe district, Quebec, the summit of which is 4,160 feet above sea-level.

Province and Mountain Peak.	Elevation.	N. Lat.		W. Long.		Range.
	ft.	°	′	°	′	
Alberta—						
Alberta	11,874	52	14	117	36	Rocky mts.
Alexandra[1]	11,214	51	59	117	12	"
Assiniboine[1]	11,870	50	56	115	42	"
Athabaska	11,452	52	07	117	11	"
Coleman	11,000	52	06	116	55	"
Columbia[1]	12,294	52	09	117	27	"
Deltaform[1]	11,235	51	18	116	15	"
Diadem	11,060	52	19	117	00	"
Forbes	11,902	51	48	116	56	"
Fryatt	11,026	52	33	117	54	"
Hector	11,135	51	34	116	15	"
Hungabee[1]	11,457	51	20	116	17	"
Joffre[1]	11,316	50	32	115	12	"
King Edward[1]	11,400	52	10	117	30	"
Kitchener	11,500	52	13	117	19	"
Lyell[1]	11,495	51	58	117	06	"
Lefroy[1]	11,230	51	22	116	17	"
Lunette[1]	11,150	50	52	115	39	"
Sir Douglas[1]	11,174	50	43	115	20	"
Snow Dome[1]	11,340	52	11	117	19	"
Stutfield	11,320	52	15	117	29	"
Temple	11,636	51	21	116	15	"
The Twins	11,675 12,085	52	13	117	12	"
Victoria[1]	11,365	51	23	116	18	"
Wilson	11,000	51	58	116	45	"
Woolley	11,170	52	18	117	25	"

---

[1] This peak is on the interprovincial boundary between Alberta and British Columbia.

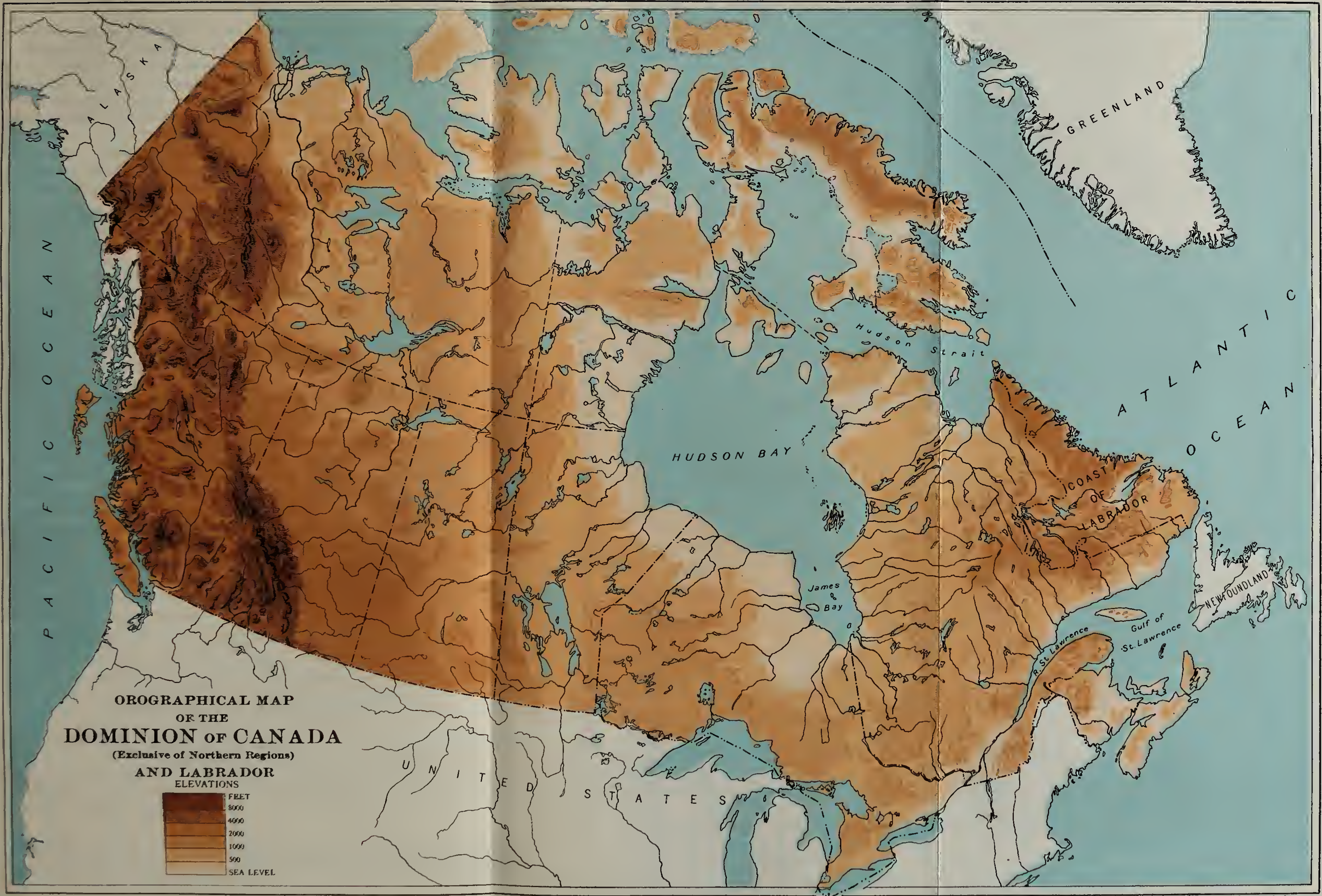
2.—Mountain Peaks over 11,000 Feet in Elevation, with Latitude and Longitude—con.

Province and Mountain Peak.	Elevation.	N. Lat.		W. Long.		Range.
	ft.	°	′	°	′	
British Columbia—						
Bush	11,000	54	00	120	15	Rocky mts.
Bryce	11,507	52	03	117	20	"
Clemenceau	12,001	[1]		[1]		"
Chown	11,500	53	26	119	26	"
Delphine	11,076	50	28	116	25	Selkirk mts.
Fairweather[2]	15,287	58	54	137	31	St. Elias mts.
Farnham	11,342	50	29	116	27	Selkirk mts.
Goodsir	11,676	51	12	116	24	Rocky mts.
Hasler	11,113	51	09	117	25	Selkirk mts.
Huber	11,051	51	22	116	18	"
Jumbo	11,217	50	24	116	32	Rocky mts.
King George	11,226	50	36	115	24	"
Resplendent	11,240	53	05	119	07	"
Robson	12,972	53	07	119	08	"
Root[2]	12,860	58	59	137	30	St. Elias mts.
Selwyn	11,013	51	09	117	24	Selkirk mts.
Sir Alexander	11,000	54	00	120	15	Rocky mts.
Sir Sandford	11,590	51	39	117	52	Selkirk mts.
The Helmet	11,160	51	11	116	20	Rocky mts.
Waddington	13,260	51	23	125	16	Coast mts.
Whitehorn	11,101	53	08	119	16	Rocky mts.
Yukon—[3]						
Alverstone	14,500	60	21	139	02	St. Elias mts.
Augusta	14,070	60	18	140	28	"
Baird	11,375	60	19	140	31	"
Badham	12,625	60	38	139	47	"
Cook	13,760	60	10	139	59	"
Craig	13,250	[1]		[1]		"
Hubbard	14,950	61	16	140	53	"
Jeannette	11,700	60	20	140	43	"
King	17,130	60	35	140	39	"
Logan	19,850	60	35	140	21	"
Lucania	17,150	61	01	140	28	"
Malaspina	12,150	60	19	140	34	"
McArthur	14,400	60	36	140	13	"
Newton	13,811	60	19	140	52	"
St. Elias	18,008	60	18	140	57	"
Steele	16,439	61	06	140	19	"
Strickland	13,818	61	14	140	45	"
Vancouver	15,696	60	21	139	42	"
Walsh	14,498	61	00	140	00	"
Wood	15,885	61	14	140	31	"

---

[1] Data not available. [2] This peak is on the international boundary between British Columbia and Alaska. [3] The enumerated peaks in Yukon are on or near the Yukon-Alaska boundary.

The southern portion of the eastern declivity, from the Rocky mountains down to lake Winnipeg, is comprised in the Nelson River drainage emptying into Hudson bay; representing the presently settled part of Western Canada, it includes the treeless prairies and comprises the lands which, in the main, produce Canada's great wheat crops. This area is characteristically different from other parts of Canada in that any exposure of surface rock is rare. Generally, it is overlain by great depths of clay soil, through which the streams have cut themselves down into deep coulées and the rivers into deep wide valleys. Lakes of any considerable extent are infrequent and usually quite shallow; in the dry prairie section there are many places where the evaporation from the broad and shallow bodies of water is so great that they have little or no outflowage and consequently the concentration of mineral salts in the water makes it unfit for domestic use. The terrain is generally smooth or gently undulating and, from an elevation of 3,400 feet at Calgary, falls away gradually to an elevation of 800 feet around lake Winnipeg 700 miles to the east.


OROGRAPHICAL MAP
OF THE
DOMINION OF CANADA
(Exclusive of Northern Regions)
AND LABRADOR
ELEVATIONS
FEET
8000
4000
2000
1000
500
SEA LEVEL
PACIFIC OCEAN
ALASKA
GREENLAND
HUDSON BAY
Hudson Strait
ATLANTIC OCEAN
COAST OF LABRADOR
James Bay
R. St. Lawrence
Gulf of St. Lawrence
NEWFOUNDLAND
UNITED STATES

Compiled, drawn, and printed at the office of the Surveyor General, Ottawa,

2.—Mountai

Pro
British Colum
Bush.......
Bryce......
Clemencea
Chown.....
Delphine...
Fairweathe
Farnham...
Goodsir....
Hasler.....
Huber.....
Jumbo.....
King Georg
Resplenden
Robson....
Root[2]......
Selwyn.....
Sir Alexand
Sir Sandfor
The Helme
Waddington
Whitehorn.
Yukon—[3]
Alverstone.
Augusta....
Baird......
Badham....
Cook.......
Craig.......
Hubbard...
Jeannette...
King........
Logan.......
Lucania.....
Malaspina..
McArthur..
Newton.....
St. Elias....
Steele.......
Strickland..
Vancouver..
Walsh.......
Wood.......

---

[1] Data not a
and Alaska.

The sout
to lake Winn
bay; represer
less prairies
wheat crops.
that any exp
of clay soil, t
and the rive
quent and u
where the ev
they have li
salts in the
or gently un
gradually to

Just north of Edmonton a height of land turns the waters to flow north into the great Mackenzie river, over 2,500 miles long, whose valley with its low elevation above the sea is the outstanding feature of the Northwest Territories. In this watershed the terrain becomes less smooth with prominent elevations in the Caribou, Horn, and Franklin mountains and the clay soils of the prairies give way to more of sand and gravel. Great Slave and Great Bear lakes, each half as large again as lake Ontario and less elevated above the sea than lake Erie, are notable features; north and east of these two great lakes the country comes within the Canadian Shield* and the rock with some shallow overburden slopes gently down to the Arctic ocean without any large uplifts to break the monotony.

Going east again, in the more northerly part there is encountered the orographical influence of Hudson bay which, indenting the continent so deeply and with rivers running in from west, south, and east, has an enormous drainage basin mainly in Manitoba, Ontario, and Quebec. Practically all of this great basin, excepting the Nelson River drainage, is included in the Canadian Shield, the surface characteristic of which is hard rock either exposed or overlain with shallow soil generally confining agriculture to the valleys or small basins. With only small areas in northeastern Quebec rising above 2,000 feet in elevation, there are no great eminences, but the surface is generally accidented by many hills and hollows with countless numbers of lakes and streams. On its west and south sides, Hudson bay is bordered by a strip of low land under 500 feet in elevation and varying in width from one to two hundred miles; in the southerly part of these flat, low lands the rock is overlain with a considerable depth of soil sometimes referred to as the clay belt of northern Ontario.

South and east of Hudson bay the predominating feature, both orographically and economically, is the very extensive depression containing the Great Lakes and the St. Lawrence river which connects them with the Atlantic ocean. The bulk of the drainage basin of the Great Lakes and the St. Lawrence lies within the limits of the Canadian Shield with the same characteristics as already described. The very important exception is the valley of the St. Lawrence river from Kingston to Quebec and the peninsula of Ontario formed by the Great Lakes which together are generally known as the St. Lawrence Lowlands, about 35,000 square miles in area. At present, containing the greater part of the population of Canada, this industrial area is of great economic importance; the climatic conditions and fertile soil combine to make it most suitable for mixed farming.

The Maritime Provinces, New Brunswick, Nova Scotia, and Prince Edward Island, together with the southeastern portion of Quebec, embrace an extension northward of the Appalachian mountains but, excepting the Notre Dame mountains of Gaspe peninsula, the comparatively low elevations are better described as hills. The whole area may be regarded as a peninsula jutting out with bold and broken coast-line to separate the gulf of St. Lawrence from the Atlantic and it is this situation that dominates the orography; with the exception of the St. John, the rivers are of no great length in their courses down to the sea. It is a beautiful country of diversified character with areas of good farm lands; the broken coast provides many good harbours and the only ocean ports open throughout the whole year that Canada possesses on the Atlantic seaboard.

---

* Excepting the St. Lawrence Lowlands, the Maritime Provinces, and the Hudson Bay Lowland, the Canadian Shield embraces all of Canada east of a line commencing at Darnley bay on the Arctic coast and running south and east through Great Bear lake, Great Slave lake, lake Athabaska, lake Winnipeg, and Lake of the Woods on the International Boundary.

Section 2.—Lakes and Rivers.

The fresh-water area of Canada is unusually large constituting over 6 p.c. of the total area of the country. The outstanding feature is the Great Lakes, details concerning which are given in Table 3.

Particularly notable are the depth of lake Superior and the shallowness of lake St. Clair and lake Erie.

3.—Areas, Elevations, and Depths of the Great Lakes.

Lake.	Length.	Breadth.	Maximum Depth.	Area.	Elevation Above Sea-level.
	miles.	miles.	feet.	sq. miles.	feet.
Superior	383	160	1,302	31,820	602·23
Michigan	321	118	923	22,400	580·77
Huron	247	101	750	23,010	580·77
St. Clair	26	24	23	460	575·30
Erie	241	57	210	9,940	572·40
Ontario	193	53	774	7,540	245·88

Lake Superior, with an area of 31,820 square miles, is the largest body of fresh water in the world. As the International Boundary between Canada and the United States passes through the waters of lakes Superior, Huron, St. Clair, Erie, and Ontario, only a part of the areas of these lakes given in the above statement is Canadian, while the whole of lake Michigan is within United States territory. The total length of the St. Lawrence waterway, from the head of the St. Louis river in Minnesota to Pointe-des-Monts at the entrance of the gulf of St. Lawrence, is 1,900 miles. The great obstacle to navigation on this waterway was the rise of 326 feet between lakes Ontario and Erie, which is now surmounted by the Welland ship canal; the river itself dropping over the escarpment at Niagara creates perhaps the most famous waterfall in the world. The Great Lakes, with the St. Lawrence river, form the most important system of waterways on the continent and one of the world's most notable fresh-water transportation routes. In addition to the Great Lakes there are many other remarkably large lakes; the eleven following, with their areas in square miles in parentheses, are all over 1,000 square miles in area: Great Bear (11,660), Great Slave (11,170), Winnipeg (9,398), Athabaska (3,058), Reindeer (2,444), Winnipegosis (2,086), Manitoba (1,817), Dubawnt (1,600), Nipigon (1,870), Southern Indian (1,200), Lake of the Woods (1,346). Apart from these lakes, named as notable for their size, there are innumerable other lakes scattered all over that major portion of the area of Canada lying within the Canadian Shield. In an area of 6,094 square miles, accurately mapped, just south and east of lake Winnipeg, there are 3,000 lakes; in an area of 5,294 square miles, accurately mapped, southwest of Reindeer lake in Saskatchewan, there are 7,500 lakes. A table at pp. 12-13 of the 1938 Year Book gave a list of the principal lakes of Canada, by provinces, with their elevations in feet and their areas in square miles.

The river systems of Canada, excluding the Arctic islands, are best studied by segregating the main drainage basins as shown in Table 4.*

4.—Drainage Basins in Canada.

Drainage Basin.	Area Drained.[1]	Drainage Basin.	Area Drained.[1]
	sq. miles.		sq. miles.
Atlantic Basin.		**Arctic Basin.**	
Atlantic or Maritime Provinces	61,151	Great Slave lake	370,681
Great Lakes and St. Lawrence river	359,312	Arctic	559,676
Total	**420,463**	**Total**	**930,357**
		Pacific Basin.	
Hudson Bay Basin.		Pacific	273,540
		Yukon river	127,190
Northern Quebec	343,259		
Southwest Hudson bay	283,997	**Total**	**400,730**
Nelson river	368,182		
Western Hudson bay	383,722	**Gulf of Mexico Basin**	**10,121**
Total	**1,379,160**	**Canada, Less Arctic Archipelago**	**3,140,831**

[1] Areas are approximate and are exclusive for all rivers of those portions of their basins which lie in United States territory.

It is noteworthy that the greater part of the Dominion drains into Hudson bay and the Arctic ocean; the Nelson River drainage is exceptional in running *through* the most arable and the most settled part of the West, but, otherwise, the rivers run *away* from the settled areas towards the cold northern salt waters and this adversely affects their industrial utility. The Mackenzie, which drains Great Slave lake is, with its headwaters, the longest river in Canada (2,514 miles) and its valley constitutes the natural transportation route through the Northwest Territories down to the Arctic ocean. From Fort Smith, on the Slave river, large river boats run without any obstruction down to Aklavik in the delta of the Mackenzie, a distance of 1,292 miles. In Eastern Canada it is the Great Lakes and St. Lawrence drainage basin that dominates all others and has undergone the greatest development. The St. Lawrence river and the Great Lakes provide a water route from the Atlantic as far as Fort William and Port Arthur, twin cities situated on lake Superior and only 419 miles from Winnipeg, the half-way mark in distance across the Dominion. The main tributaries of the St. Lawrence all flowing south (most of which have lakes available for reservoiring), together with the main river itself, have developed and undeveloped water powers whose economic value it would be difficult to overestimate. Apart from the plains region of the West, the rivers of Canada have a vast power potentiality well distributed over the country, as may be seen by reference to the water-power map at the beginning of Chapter XIII. A table at p. 15 of the 1938 Year Book gave the lengths of the principal rivers with their tributaries classified according to the four major drainage basins.

Section 3.—Islands.

The islands of Canada are among its most remarkable geographic features. They include the very large group lying in the Arctic ocean, the fringe of both large and small islands off the Pacific coast, those of the Maritime Provinces and Quebec in the Atlantic ocean and the gulf of St. Lawrence, together with the islands of the Great Lakes and other inland waters. The Arctic islands are of vast extent, Baffin,

---

* This classification is that of the Dominion Water and Power Bureau, Department of Mines and Resources.

Victoria, and Ellesmere, the three largest, being approximately 201,600, 80,450, and 75,024 square miles in area, respectively, but Banks, Devon, Somerset, Prince of Wales, Melville, and Axel Heiberg are each larger than Prince Edward Island; Southampton, another very large island, lies just within the wide mouth of Hudson bay. Their economic potentialities, beyond deposits of coal and other minerals, have not been fully established. The Pacific Coast islands, with the exception of Vancouver island and the Queen Charlotte group, are small and dot the western coast of British Columbia from Dixon entrance to the southern boundary of the province. Vancouver island is 285 miles long and from 40 to 80 miles broad, covering an area of about 12,408 square miles; the mountain range which forms its backbone rises again to form the Queen Charlotte islands farther north. These islands figure largely in the mining, lumbering, and fishing industries of the West, and together with the bold and deeply indented coast-line provide a region for scenic cruises rivalling those of Norway.

On the eastern coast of the Dominion are the island province of Prince Edward Island, the islands of Cape Breton (an integral part of Nova Scotia), Anticosti, and the Magdalen group (included in the province of Quebec), and the islands of Grand Manan and Campobello (part of the province of New Brunswick) in the bay of Fundy. Prince Edward island is 2,184 square miles in area, Cape Breton 3,970 and Anticosti of about the same extent. Fishing activities in these eastern islands are important, while agriculture on Prince Edward island and mining on Cape Breton are the chief occupations of the inhabitants.

Manitoulin island and the Georgian Bay islands in lake Huron and the Thousand Islands group in the St. Lawrence river, at its outlet from lake Ontario, are the more important islands of the inland waters.

PART II.—GEOLOGY.

Section 1.—Geology of Canada.*

In the section on Orography, pp. 9-11, the physical features of Canada have been considered and the natural divisions have been briefly described. These physiographic divisions depend fundamentally on underlying differences of geological structure and hence are geomorphic ones as well as physiographic. A description of the geology of Canada hence involves an account of the geology of each of these divisions. They are shown in the map on p. 15 and include:—

(1) The Canadian Shield, a vast V-shaped area of ancient rocks surrounding Hudson bay.

(2) The St. Lawrence Region, a lowland belt bordering the St. Lawrence river and extending westward through southern Ontario to lake Huron. It is underlain chiefly by flat or gently dipping strata of Palæozoic age.

(3) The Appalachian and Acadian Regions, comprising the Maritime Provinces and most of that part of Quebec lying south of the St. Lawrence river. It is a hilly or mountainous region and is made up largely of disturbed beds.

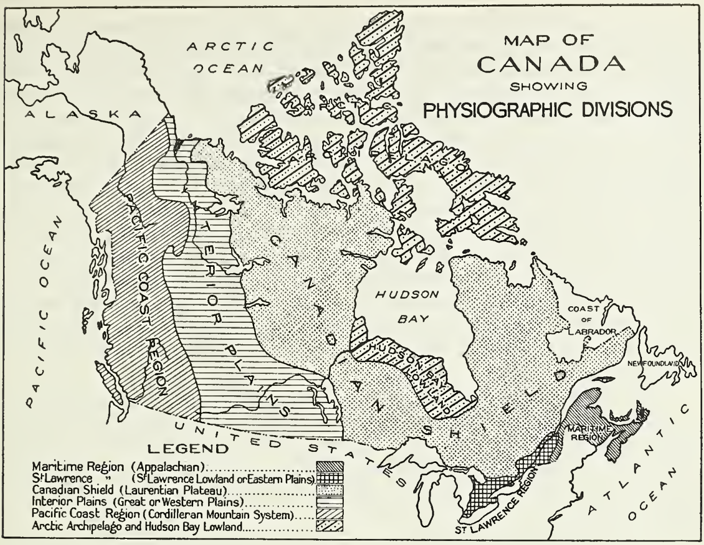
(4) The Arctic Archipelago, with which is linked the Hudson Bay Lowland. The former includes the islands lying north of the Canadian Shield, while the latter is a broad, flat region, underlain by flat-lying Palæozoic beds.

(5) The Interior Plains Region of Manitoba, Saskatchewan, and Alberta, which stretches down Mackenzie valley to the Arctic ocean. It is underlain by only slightly disturbed Palæozoic and Mesozoic strata.

(6) The Cordilleran Region, including the mountainous country of the Pacific coast which is developed on highly disturbed rocks.

---

* By F. J. Alcock, Ph.D., Geologist, Department of Mines and Resources, Ottawa.


MAP OF
CANADA
SHOWING
PHYSIOGRAPHIC DIVISIONS
ARCTIC OCEAN
ALASKA
ARCTIC ARCHIPELAGO
PACIFIC OCEAN
PACIFIC COAST REGION
INTERIOR PLAINS
CANADIAN SHIELD
HUDSON BAY
HUDSON BAY LOWLAND
COAST OF LABRADOR
NEWFOUNDLAND
MARITIME REGION
ATLANTIC OCEAN
ST LAWRENCE REGION
UNITED STATES
LEGEND
Maritime Region (Appalachian)
St Lawrence " (St Lawrence Lowland or Eastern Plains)
Canadian Shield (Laurentian Plateau)
Interior Plains (Great or Western Plains)
Pacific Coast Region (Cordilleran Mountain System)
Arctic Archipelago and Hudson Bay Lowland

The following geological time scale will assist the reader by showing the relationship of the various formations mentioned in this article to the geological map which faces p. 24.

GEOLOGICAL TIME SCALE.

Era.	Sub-Era.	Period.	Orogeny.
CENOZOIC	QUATERNARY	Recent	
		Pleistocene	
	TERTIARY	Pliocene	
		Miocene	
		Oligocene	
		Eocene	Laramide
MESOZOIC		Cretaceous	Coast intrusions
		Jurassic	
		Triassic	
PALÆOZOIC	CARBONIFEROUS	Permian	Appalachian
		Pennsylvanian	
		Mississippian	
		Devonian	Shickshockian
		Silurian	
		Ordovician	
		Cambrian	
PROTEROZOIC (late Precambrian)		Keweenawan	Killarnean
		Huronian	
ARCHÆAN (early Precambrian)		Timiskamian	Algoman
		Keewatin	Laurentian

The Canadian Shield.—Comprising an area of nearly two million square miles, or more than one-half of the whole of Canada, this plateau-like region rises only locally to more than 1,500 or 2,000 feet above sea-level, except in Labrador where altitudes up to 5,000 feet are reached in certain places. Its most characteristic feature is its low relief. Standing anywhere on an elevation an even skyline meets the eye in every direction. Throughout most of the region the hills and ridges rise no more than 100 or 200 feet above the level of the adjacent lakes and valleys. In places, however, as locally along the southern margins of the Shield and in northeastern Quebec along the Labrador border, the relief is considerably more rugged. Though the general relief is low, the region in detail has a very irregular topography consisting of low, hummocky hills and ridges separated by depressions which are commonly occupied by lakes or muskegs. Lakes of all sizes and shapes, and containing numerous islands, dot practically the entire area, in places giving the appearance of a drowned area with only the ridge tops appearing. The rivers as a rule are mere successions of lake expansions connected by stretches in which rapids and waterfalls are numerous.

The rocks of the Shield are mainly of Precambrian age. They form a continental mass which in Precambrian time extended out in all directions beyond the present limits of the Shield. During the succeeding Palæozoic and Mesozoic Eras the Shield was many times at least partly flooded by seas which advanced over it and later retreated. The sediments that accumulated in these seas were largely swept away by later erosion.

From the beginning of the Cambrian period on to the present, the Shield has been a stable mass. During this time it has suffered vertical movement at intervals but it has been unaffected by any folding or mountain-building deformation. Its earlier or Precambrian history, however, was very complex and included periods of volcanism, sedimentation, folding, mountain-building, and igneous intrusion, and also long intervals of quiescence in which erosion was the active process.

Precambrian time can be conveniently divided into two major divisions, the Archæan or early Precambrian and the Proterozoic or late Precambrian. The Archæan in turn falls into two subdivisions, in the earlier of which volcanism took place on a tremendous scale and lavas and tuffs, usually referred to as Keewatin, accumulated over wide areas in thicknesses measured in thousands of feet. With the volcanics are locally associated sediments, in many places altered to mica schists and gneisses. In the Rainy Lake region of western Ontario a thick succession of such sediments, known as the Couchiching series, lies below the Keewatin lavas. In northern Manitoba and Saskatchewan interbedded lavas and sediments of probably similar age are referred to as the Wekusko group. In eastern Ontario and southwestern Quebec a thick series composed of limestone, quartzite, and sedimentary gneiss, known as the Grenville series, is also usually regarded as having been deposited during this first part of the early Precambrian Era. This period was terminated by widespread but gentle folding movements accompanied by some intrusions of granite.

During the second period of the early Precambrian, a thick formation of clastic sediments was deposited. These are commonly referred to in northern Ontario and Quebec as the Timiskaming series. In northern Manitoba and Saskatchewan similar sediments apparently occupying a corresponding stratigraphic position are referred to as the Missi series. Certain series of sediments, such as the Sudbury of the

Sudbury region, the Doré at Michipicoten, the Ridout of the Woman River area, and others, are of disputed age being regarded by some geologists as Timiskamian and by others as belonging in the Keewatin. The period of Timiskamian sedimentation was succeeded by a mountain-building revolution which was accompanied by widespread intrusion of granite, commonly referred to as the Algoman batholiths. The time of the Algoman intrusions was a great mineral-forming epoch. Most of the gold ores of the Shield, and the copper-zinc sulphide replacement deposits, such as those of Noranda, Flin Flon, Sherritt-Gordon, and many others, were formed at this time from mineralizers given off by these intrusives. A long period of quiescence followed in which erosion reduced the region to one of low relief.

The Proterozoic or late Precambrian included the long era during which thick series of sediments were deposited on this eroded complex of Archæan rocks. These strata are best developed in the region around lake Superior and north of lake Huron. They belong to two systems, an older known as the Huronian and a younger called the Keweenawan. North of lake Huron the Huronian strata consist of an older series called the Bruce—made up of conglomerates, quartzites, and impure dolomitic limestone, totalling in thickness up to 12,000 feet—and a younger series named the Cobalt—made up of boulder conglomerate and other materials of probable glacial origin, overlain by quartzite and slightly calcareous quartzite, the whole having a thickness up to 10,000 feet. These two series are separated by an unconformity but the time interval represented was probably not great. The beds for the most part lie with only gentle dips except on the north shore of lake Huron and eastward where they stand at high angles as a result of mountain-building movements. The Huronian rocks are intruded by dykes and sills of quartz diabase extending over wide areas of northeastern Ontario. These intrusions of what is called the Nipissing diabase attracted the silver-cobalt camp of Cobalt, and subsidiary camps. Copper is associated with this diabase in the western part of the region. The Huronian rocks are cut by masses of Killarney granite intruded during the mountain-building period at the close of the Huronian to which reference has been made, and both the Huronian sediments and the Nipissing diabase are cut by small masses of a younger granite which is rich in alkalies.

At Sudbury a series of volcanic and sedimentary rocks filling the basin of the nickel irruptive is known as the Whitewater series. It has usually been referred to as Upper Huronian. The nickel-bearing irruptive was intruded at the base of this series as a saucer-shaped sill or laccolith, 37 miles long and 17 miles wide. It differentiated from norite at the base to micropegmatite at the top. This intrusive is the source of the nickel-copper ores of the region, the deposits occurring along the outer margins of the mass or in offsets where the mass injects the surrounding rocks. Cutting all these rocks are trap and olivine diabase dykes.

North of lake Superior is a group of late Precambrian rocks which has been described under the term Kaministikwan. The group includes the Animikie series of conglomerate, iron formation, and shale; the Sibley series of conglomerate, sandstone, limestone, and tuff; and the Osler series of lavas, conglomerate, sandstone, and tuff. Strata resembling the Animikie rocks of the Lake Superior region also occur in the central part of Ungava peninsula and on the Belcher islands and the east coast of Hudson bay.

In the Northwest Territories a group of Proterozoic rocks known as the Great Slave group consists of sediments and volcanics and rests on an old erosion surface crossing granitic intrusives and the upturned edges of Archæan sediments. The group consists of a lower part made up of conglomerate, sandstone, quartzite, shale, iron formation, limestone, tuff, agglomerate, andesite, and dolomite, and an upper part of dolomite, shale, limestone, sandstone, and lavas with interbeds of argillite. Still farther north in the Bathurst Inlet region of the Arctic coast are Proterozoic strata. Resting on granite is the Epworth dolomite which has a thin basal conglomerate and grades up through arkose into a cherty dolomite. Above this is the Kanuyak formation, made up of fine-grained calcareous tuffs and tuff-conglomerates, which at one place shows a structural unconformity with the Epworth beds. A still younger formation is the Goulburn quartzite which contains rounded fragments apparently of the Epworth and Kanuyak. The next younger rocks are those of the Coppermine River series to which reference will be made later.

The Keweenawan, the later division of the Proterozoic, saw the accumulation of great thicknesses of clastic deposits, in places accompanied by volcanic rocks, over various parts of the Shield. The type area is on the south side of lake Superior where thousands of feet of sediments and lavas are exposed. On the Canadian side several smaller areas occur on the east coast of lake Superior.

In the northwestern part of Canada are wide areas underlain by flat-lying or only gently dipping beds which are regarded as late Precambrian in age and are commonly correlated with the Keweenawan. The beds consist for the most part of sandstone and arkose with some conglomerate and shale. South of lake Athabaska is a broad area of these rocks to which the term Athabaska series has been applied. Smaller patches also occur north of the lake and to the northeast is another considerable area along the Dubawnt river. Interbedded basaltic flows and diabase dykes occur in places with these rocks. On Great Slave lake the Et-then series of clastic sediments is considered to be of equivalent age, while farther north on the Coppermine river and at Bathurst inlet a series of interbedded sediments and volcanics is known as the Coppermine River series. It carries notable copper deposits. Trap dykes, commonly considered as Keweenawan in age, are of wide occurrence over the entire Shield and are the youngest of the Precambrian rocks.

During the Pleistocene or Glacial period, the Shield was heavily glaciated by huge glaciers of continental extent. One of these sheets had its gathering ground west of Hudson bay and another in the heart of Labrador. From these centres the ice moved out in all directions. In its advance it scoured off the residual soil, smoothed down the topography, polished and striated the rock surface, and by scattering debris irregularly over the surface completely disorganized the drainage. The result was the formation of the numerous lakes which are everywhere so characteristic a feature of the region. On the retreat of the glaciers, large temporary lakes stood in places in front of ice and in these accumulated clay and other fine stratified deposits forming what are known as clay belts.

The Canadian Shield is a great store-house of mineral wealth and hence offers an attractive field to the prospector. It is not because its rocks are of Precambrian age that such is the case. It is rather because parts of it offer geological conditions favourable for the occurrence of minerals. Ore deposits the world over have, for the most part, resulted from mineralizing solutions given off from masses of igneous rocks during the late stages of their intrusion and cooling, and where we have an association of older rocks invaded by intrusives we may expect to find mineralization, no matter what age the rocks may be. During the Precambrian the rocks of the Shield, as has already been mentioned, were extensively invaded from time to time by intrusive masses of composition varying from acid to basic. Reference has been made to the nickel-copper deposits associated with the Sudbury irruptive, the silver-cobalt ores occurring with the Nipissing diabase, the gold deposits of Ontario and Quebec associated with porphyry and other granitic rocks. The gold-bearing copper ores of western Quebec, the zinc-copper ores of northern Manitoba, the pitchblende and silver deposits of Great Bear lake are other important mineral occurrences which are being developed. In eastern Ontario and western Quebec, where granite has intruded limestone and other sediments of the Grenville series, occur deposits of mica, graphite, feldspar, magnesite, fluorite, kaolin, molybdenite, talc, apatite, and other minerals.

The St. Lawrence Region.—The St. Lawrence Region is a lowland which stretches westward from Quebec city for a distance of some 600 miles to lake Huron. It begins as a narrow strip bordering each side of the St. Lawrence and gradually widens until at Montreal it has a width of 120 miles. Its northerly border continues on up the Ottawa river but 50 miles west of Ottawa the belt is interrupted by a projection of the Canadian Shield known as the Frontenac axis which extends southward crossing the St. Lawrence between Kingston and Brockville. West of this axis the lowland occupies a triangular area lying between lakes Ontario, Erie, and Huron and an east and west line drawn from Kingston to the south end of Georgian bay. This western part in turn falls into two divisions separated from each other by a prominent topographic feature, the Niagara escarpment, an abrupt, eastward-facing rise of 250 to 300 feet, extending from Niagara river in a northwest direction to Bruce peninsula. Still farther to the northwest, the escarpment is continued by the northward-facing cliffs of Manitoulin and adjacent islands.

The St. Lawrence Region is underlain by Palæozoic strata ranging in age from late Cambrian to late Devonian. For the most part the beds lie flat or at low angles. In places, however, as in southwestern Ontario, they are folded into broad low domes and elsewhere, as in the vicinity of Ottawa, they are traversed by faults of considerable magnitude. In general the beds dip away from the Canadian Shield so that as one proceeds in a direction leaving the Shield, progressively younger strata are encountered.

The strata are almost wholly of marine origin and were deposited in seas that spread out over a large part of the continent. Differential movements caused these seas to advance and retreat, so that the sediments which were deposited in them vary considerably. There are also local gaps in the sedimentary sequence caused by these movements, but the movements were so gentle that there are no angular unconformities.

The oldest of the Palæozoic formations is the Potsdam sandstone of Upper Cambrian age. It is followed by a thick succession of Ordovician strata. In the Ottawa-Montreal region these beds have a thickness of about 6,000 feet and are the youngest measures there are. They include Beekmantown or early Ordovician dolomitic limestones, Chazy sandstones, shales, and limestones, Black River limestone, and Trenton limestone deposited during the Middle Ordovician, and Upper Ordovician beds made up of the Utica shale, Lorraine shales with limestone and sandy layers, and the Richmond group of shales and limestones. The Lorraine and Richmond rocks are developed chiefly southeast of the St. Lawrence.

West of the Frontenac axis and east of the Niagara escarpment, the middle division of the St. Lawrence Region is also underlain by Ordovician strata. Along the escarpment these beds are succeeded by Silurian measures of which the lowest group is the Medina composed of sandstone, shale, and shaly limestone. These beds are succeeded by shales and limestones of the Clinton group which in turn are followed by the Rochester shale and Lockport dolomite of the Niagara group. Above the Lockport is the Guelph dolomite and this in turn is overlain by the Cayuga group made up of the Salina formation and the Lower Munroe dolomite and shale. The total thickness of the Silurian measures is around 1,750 feet.

The Cayugan beds are terminated by an erosion surface upon which rest Devonian beds about 1,000 feet in thickness. The succession from bottom to top is as follows: Sylvania sandstone, Upper Munroe dolomite, Oriskany sandstone, Onondaga limestone, Delaware limestone, Hamilton limestone and shale, Huron shale, and Port Lambton shale.

The only intrusive rocks of the St. Lawrence Region occur in the eastern part in what are known as the Monteregian hills. These are eight in number occurring along an approximately east and west line some 50 miles long. The most westerly is Mount Royal at Montreal. The hills are circular or oval in outline and rise abruptly to elevations of from 600 to 1,200 feet above the surrounding flat country. The flanks of the hills consist of altered and hardened sediments and the centres are composed of intrusive rocks, including various alkali types such as nepheline syenites, essexites, etc. The age of these intrusives may be as late as Pliocene.

The whole region was overrun by Pleistocene ice sheets and much of the bedrock is covered by debris left by these glaciers. At Toronto stratified deposits carrying plant and animal remains lie between deposits of glacial material. These layers show that the region was crossed at least three times by ice sheets coming from central Ungava and that between these advances the region had a climate considerably milder than at present. In late Pleistocene time the region was depressed and an arm of the sea extended up the St. Lawrence valley as far at least as Brockville and up the Ottawa River valley beyond Ottawa. At Ottawa the sea stood at least 688 feet above its present level. In this sea, layers of clay were deposited and along its shores deposits of sand accumulated. Eventually uplift of the land caused the withdrawal of this sea to which the name Champlain is given.

The chief mineral occurrences of the St. Lawrence Region include petroleum and natural gas which are produced in southwest Ontario, salt from the counties bordering lakes Huron and St. Clair, and gypsum from the Grand River valley. Other materials which are available at many places include limestone and dolomite used in chemical and metallurgical industries, rock for construction purposes and clay for brick, tile, and cement manufacture.

The Appalachian and Acadian Regions.—The Appalachian and Acadian Regions include that part of Canada lying south of the St. Lawrence river and east of a line running from Quebec city south to the foot of lake Champlain. The Appalachian Region, whose eastern boundary in Canada is the Restigouche river and Chaleur bay, is a continuation of the Appalachian Mountain system of the eastern United States. The Acadian Region lies to the southeast and comprises the provinces of New Brunswick, Nova Scotia, and Prince Edward Island.

The region is for the most part mountainous or hilly. In southeastern Quebec the Notre Dame mountains, consisting of three roughly parallel ridges trending northeast, reach elevations up to 3,100 feet and in Gaspe peninsula, the Shickshocks, actually a continuation of the same range, have heights up to 4,200 feet. Many of the mountain summits are flat-topped, showing that the region is really a dissected plateau. The Acadian Region is also largely one of plateaux, ridges, and valleys. In central New Brunswick is a rugged area with summits rising over 2,000 feet. To the east of this is a lowland area of some 10,000 square miles comprising the eastern portion of the province and all of Prince Edward island. It nowhere rises over 600 feet above the sea. Nova Scotia is largely an upland region which in the northern part of Cape Breton island reaches elevations of 1,500 feet.

The rocks of the Appalachian and Acadian Regions include sediments, volcanics, and intrusives, chiefly of Palæozoic age. In a few places rocks of Precambrian age are known and along the Bay of Fundy coast are a few areas underlain by Mesozoic rocks. The lowland area of eastern New Brunswick is underlain by little-disturbed Carboniferous beds. Elsewhere, however, throughout the region, the rocks are nearly everywhere thrown into folds with axes trending in a northeast direction and are in addition broken by faults giving rise to a complex structure typical of the Appalachian Region in general. The chief period of deformation in this part of Canada, however, was during the Devonian, whereas to the south, in the United States, the greatest disturbances took place later during the Permian at the close of the Palæozoic.

At Saint John city in southern New Brunswick is exposed a series of early Precambrian rocks made up of limestone, dolomite, quartzite, and gneiss. It is overlain by a thick succession of late Precambrian volcanic rocks upon which rest Cambrian strata. Precambrian rocks also occur in Cape Breton island. In Gaspe peninsula along the north side of Chaleur bay the Macquereau series, composed largely of quartzite, rests unconformably below Ordovician strata and may be Precambrian. Precambrian rocks have been described as occurring in central New Brunswick and in southwestern Quebec. Some of the occurrences are probably, however, of Palæozoic age.

In the mainland of Nova Scotia a thick series of altered sediments, known as the Meguma or Gold-bearing series covers wide areas and is believed to be of late Precambrian age. The lower half of its 35,000 feet thickness consists dominantly of quartzites and the upper half of slates. The series is folded along northeast lines and is broken by northwest faults, the horizontal displacement of some of which exceed a mile. The rocks are intruded by dykes and sills of diabase and by batholithic masses of grey and red granites of Devonian age.

Cambrian formations occur in southeastern Quebec, in southern New Brunswick, and in northeastern Cape Breton. In early Ordovician times sediments were deposited in the St. Lawrence River Region. The Sillery formation of red and green shales with interbedded sandstone has at Quebec a thickness of 2,000 feet. A younger series, called the Lévis, consists of dark shales and thin-bedded limestones with a thickness of possibly as much as 5,000 feet. It forms a band varying in width from 6 to 35 miles; its beds have been folded, faulted, and in places overturned. Mid-Ordovician rocks occur in southwestern Quebec and in Gaspe and northern New Brunswick. Late Ordovician rocks are developed in the Matapedia River and Chaleur Bay districts. At the close of the Ordovician there were extensive mountain-building movements. Masses of peridotite which intrude the Ordovician and older rocks may have originated at this time.

Silurian rocks are exposed in southeastern Quebec, in Gaspe, in New Brunswick, and in Nova Scotia at Arisaig and a few other places. The next marine invasion was in Lower Devonian time when great thicknesses of sediments with interbedded volcanics accumulated in New Brunswick and Gaspe. During the Middle Devonian, a thick series of sandstones accumulated in Gaspe. In the Upper Devonian was deposited in the vicinity of Maguasha, on the Gaspe coast, a group of conglomerates, sandstones, and shales, one member of which is noted for the fossil fish it has yielded. Towards the close of the Middle Devonian, the whole Appalachian and Acadian Regions were affected by mountain-building movements accompanied by the intrusion of batholithic masses of granite.

Rocks of Carboniferous age underlie the lowland belt forming much of the southeastern half of New Brunswick, the part of Nova Scotia north of the Cobequid mountains, part of the lowland south of these mountains, southwestern and northeastern Cape Breton island and all of Prince Edward island. With the Lower Carboniferous or Mississippian rocks occur the extensive gypsum deposits and the salt beds of Nova Scotia and New Brunswick and also the bituminous shales of these provinces. The Upper Carboniferous or Pennsylvanian strata contain the coal measures which occur at Sydney, and at other places in Nova Scotia and at Minto in New Brunswick. The Carboniferous beds have in places been folded and faulted but there are wide areas in which the strata have been but little disturbed since they were deposited.

Red sandstones deposited during the Triassic period are exposed in a number of small areas along the Bay of Fundy coast. In places as at North Mountain, Nova Scotia, the beds are accompanied by lava flows. During the Pleistocene the region was glaciated. At certain stages there were apparently local gathering grounds for glaciers in central New Brunswick and in central Gaspe.

The chief mineral deposits of the Appalachian and Acadian Regions include coal, asbestos, and gypsum. The coal and gypsum, as has already been mentioned, occur in the Carboniferous measures. Asbestos occurs in serpentinized peridotite in southeastern Quebec. Chromite also occurs with the peridotite. Gold occurs in quartz veins in the Gold-bearing series of Nova Scotia. Many of the deposits are located on domes or pitching anticlines. Zinc-lead deposits occur in central Gaspe in veins cutting lower Devonian beds. At Stirling in the southern part of Cape Breton island, zinc, lead, and copper sulphides occur in a series of volcanic rocks. Copper and iron pyrite deposits occur in southern Quebec. Salt occurs in Nova Scotia and New Brunswick.

The Arctic Archipelago and Hudson Bay Lowland.—The Arctic Archipelago includes the islands lying north of the Canadian Shield. They have a land area of over half a million square miles. Except for northward extension of the area of the rocks of the Canadian Shield, the islands for the most part are a series of plateaux formed of gently dipping strata.

The main Precambrian belt extends through Baffin island to Ellesmere island. Its rocks consist chiefly of granite and granite-gneiss intrusive into various types of gneisses and schists. Palæozoic strata, including Cambrian, Ordovician, Silurian, Devonian, and Carboniferous beds, cover most of the remaining area. Triassic rocks occur on the Sverdrup islands and a number of areas are underlain by Tertiary beds some of which are coal-bearing. Coal is also associated with some of the Upper Carboniferous strata at a number of places.

The Hudson Bay Lowland bordering the west side of Hudson bay has a length in a northwest direction of 800 miles, a width of from 100 to 200 miles and an area of 120,000 square miles. It rises from sea-level with a scarcely perceptible gradient to a height of about 400 feet. It is underlain by flat-lying rocks most of which are of Palæozoic age ranging from Ordovician to Devonian. An area of Mesozoic beds carrying lignite occurs in the Moose River region.

The seas in which the Palæozoic rocks which are now exposed in the Arctic Archipelago, the Hudson Bay Lowland, and the St. Lawrence Region were deposited extended at times widely over the Canadian Shield. Palæozoic outliers are known on lake St. John, lake Nipissing, and lake Timiskaming in the south, and on lake Nicholson west of Hudson bay. These outliers are mere remnants which have survived the erosion of Mesozoic and Tertiary time.

The Interior Plains.—The Interior Plains division of Canada is part of a great plains region in the interior of the continent stretching from the gulf of Mexico to the Arctic ocean. In Canada it extends from the Canadian Shield on the east to the Cordillera on the west. At the United States border it has a width of 800 miles but in the extreme northwest at the mouth of the Mackenzie river it is less than 100 miles wide. Throughout most of the region the underlying Palæozoic, Mesozoic, and Tertiary rocks are nearly flat-lying. In the northwestern part of the area, however, the Franklin range, which lies between Great Bear lake and Mackenzie river, is composed of folded strata. In western Alberta, also, the rocks are folded and faulted.

Geologically the region falls into three zones. On the east a narrow plain known as the Manitoba Lowland is developed on flat-lying Palæozoic strata which range in age from Ordovician to Devonian. In Manitoba the Ordovician beds rest on the Precambrian rocks of the Canadian Shield and commonly present a low escarpment facing the Shield. To the northwest this zone broadens to form the Mackenzie Lowland. Here over wide areas Silurian measures form the base of the Palæozoic section. In the Franklin mountains, however, red quartzites and sandstones of the Mount Clark formation are regarded as of probable Lower Cambrian age: They are succeeded by Middle and Upper Cambrian sandstones and shales. Beds regarded as of probable Ordovician age are also known to occur at the base of mount Kindle east of Wrigley and beneath the Silurian dolomite of the Great Slave Lake area. Over considerable areas strata of Cretaceous age also occur in the Mackenzie Lowland region, as for example on Liard river, on the western shores of Great Bear lake, and at several places along the Mackenzie. At the mouth of Bear river is an area covered by partly consolidated Tertiary sands and clay carrying lignite beds.

The second zone includes much of southwestern Manitoba and southern Saskatchewan and Alberta. It is a broad belt underlain by Cretaceous rocks. Its eastern border, where these strata overlap the underlying Palæozoic sediments, is an abrupt rise known as the Manitoba escarpment. Its surface gradually rises from an elevation of from 1,000 to 2,000 feet at the escarpment to from 4,000 to 5,000 feet at the border of the mountains on the west.

The third zone consists of the plateaux of Wood mountain and the Cypress hills which rise up to elevations of 1,000 feet above the level of the surrounding region. They are composed of flat-lying beds of Tertiary age.

In Pleistocene time glacial drift was widely scattered over the region. On the retreat of the ice deposits, clay accumulated in lakes which stood in front of the waning ice sheet. Much of southern Manitoba formed the bed of glacial lake Agassiz.

The Interior Plains Region is the great wheat-producing area of Canada. Coal mining is an important industry. Bituminous coal and lignites are produced in large quantities in Alberta and in small amounts in Saskatchewan from Cretaceous and Eocene beds. Natural gas is produced in large quantities from various horizons of the Cretaceous in Alberta. Petroleum has been found in the Devonian beds of the lower Mackenzie valley north of Norman, in Cretaceous strata at a number of localities in Alberta, and in Palæozoic rocks in Turner valley. Along the Athabaska river the basal member of the Lower Cretaceous, known as the McMurray or the Tar sands, is heavily impregnated with bitumen. Gypsum is obtained from the Palæozoic rocks of Manitoba and also occurs in northern Alberta. Deposits of lead and zinc occur in Devonian limestones at certain places south of Great Slave lake.

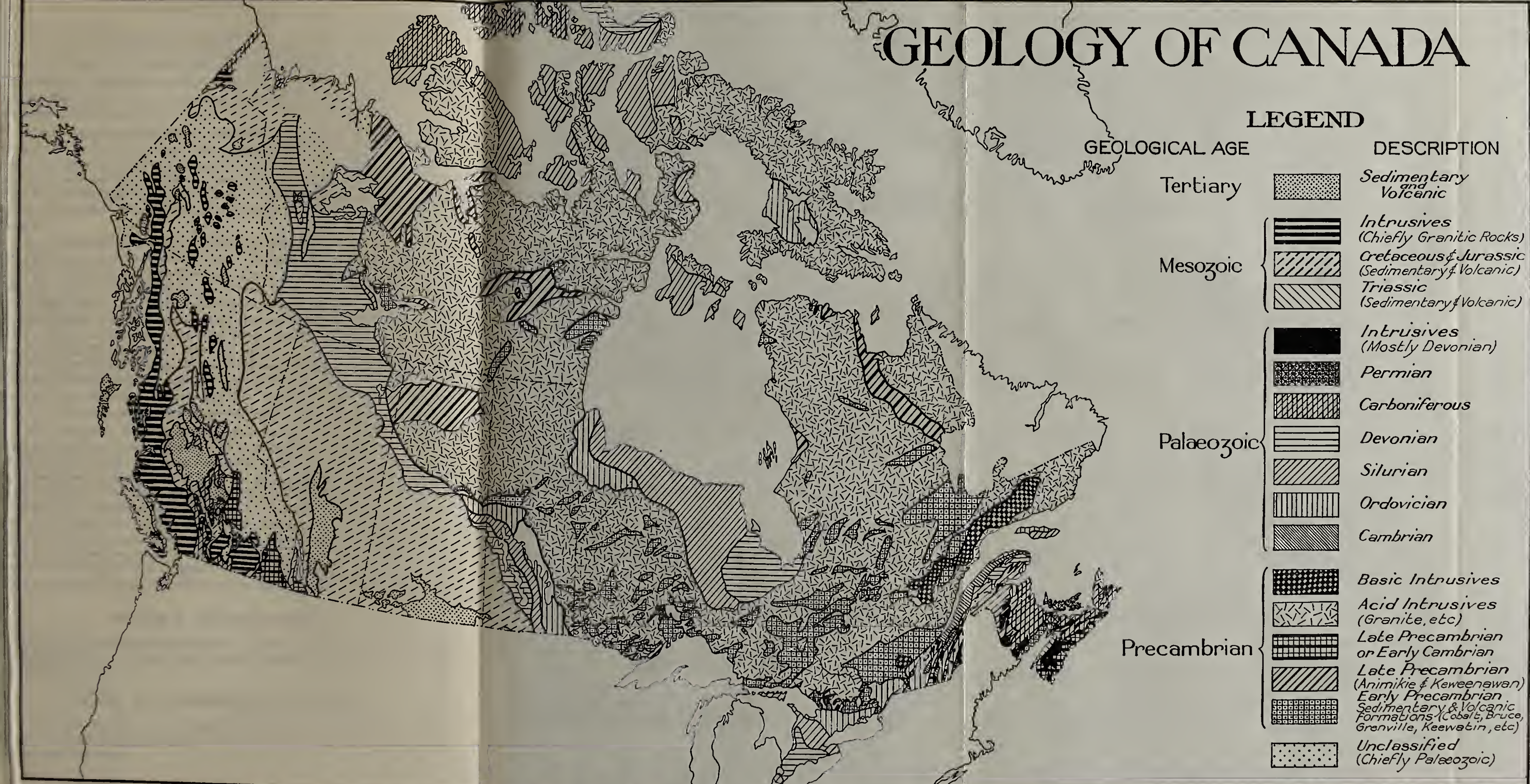
The Cordilleran Region.—The Cordilleran Region comprises the mountainous country bordering the Pacific ocean. The part of it which lies in Canada has an average width of 400 miles, a length in a northwest direction of 1,500 miles, and an area of 600,000 square miles. It is made up of three principal zones. On the east is the Rocky Mountain range; along the coast is a broad belt of mountains known as the Coast range, while between these two lies a third or intermediate belt made up of plateaux and mountain ranges. The Rocky mountains have a maximum width of 100 miles and have many peaks with elevations of from 10,000 to 12,000 feet. The Coast range, varying in width from 50 to 100 miles, rises abruptly from the coast to peaks which along the axis of the range reach elevations of from 7,000 to 10,000 feet. The interior plateau and mountain belt is represented in the north by the Yukon plateau, a gently rolling upland broken into a series of flat-topped ridges by valleys several thousand feet deep. In the southern part of British Columbia the interior region is a plateau rising 3,000 to 4,000 feet above sea-level and cut by valleys a thousand or so feet in depth. To the west this plateau either joins the Coast range directly or else is separated from it by the Cascade range and other mountains. To the east between the plateau and the Rocky mountains are a series of ranges separated by northwest-trending valleys. The Selkirk range with peaks over 11,000 feet is the most important of these.

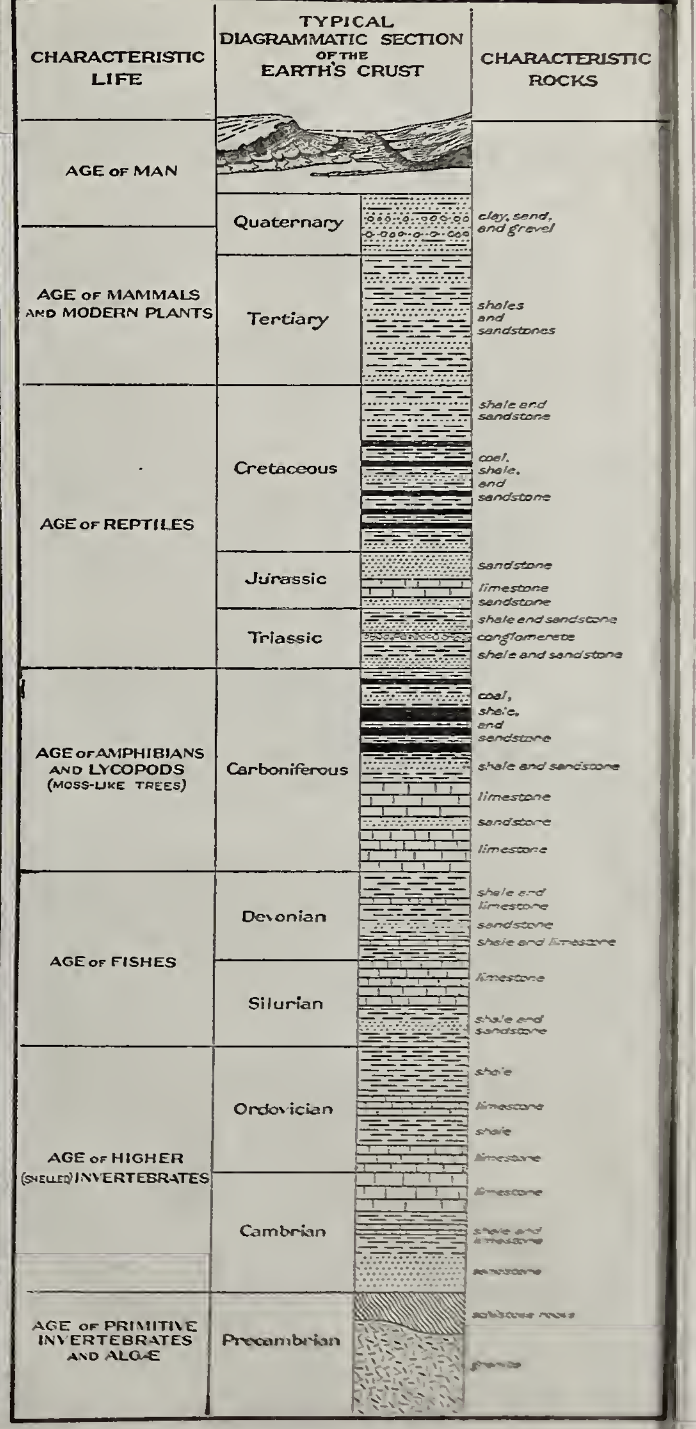
The rocks of the Cordilleran Region range in age from Precambrian to Recent. The Rocky Mountain belt is composed of great thicknesses of Precambrian, Palæozoic, and Mesozoic sediments, in most places unaccompanied by plutonic or volcanic rocks. The Coast range is essentially a complex batholith of granite of late Jurassic or early Cretaceous age cutting and enclosing sediments and volcanic rocks of earlier Mesozoic age. The Interior belt of plateaux and mountain ranges is underlain by Palæozoic, Mesozoic, and Tertiary sediments and volcanic rocks. The pre-Tertiary beds are cut by numerous bodies of plutonic rocks and in several districts strata of Precambrian age are exposed.

The geological history of the Canadian Cordilleran Region may be briefly summarized as follows: In Precambrian time sediments which now are in the form of limestones, gneisses, and schists were deposited in the interior belt. In Yukon these strata are known as the Yukon group and in central British Columbia as the Shuswap group. These have been altered by intrusive rocks and included with them may be metamorphosed phases not only of Precambrian rocks but also of much later rocks. In late Precambrian time a thick series of argillites and related sediments accumulated on the site of the southern Rockies and farther west in the region now occupied by the Purcell mountains. The Purcell series, consisting dominantly of quartzites, has a thickness of over 20,000 feet.

From the Cambrian to the Carboniferous, sedimentation progressed in the Rocky Mountain and Purcell region. Cambrian strata are best known in the Bow and Kicking Horse valleys along the main line of the Canadian Pacific railway, where a total thickness of more than 18,000 feet of Cambrian beds are exposed. Another thick section can be seen in the Mount Robson district along the Canadian National railway. In both these areas the Cambrian beds are succeeded by Ordovician strata. Silurian limestone occurs south of Kicking Horse river, in Yukon, and in the western part of Mackenzie mountains. In Devonian time the whole eastern Cordilleran Region was submerged and calcareous beds, in places

GEOLOGY OF CANADA


LEGEND
GEOLOGICAL AGE
DESCRIPTION
Tertiary
Sedimentary and Volcanic
Mesozoic
Intrusives (Chiefly Granitic Rocks)
Cretaceous & Jurassic (Sedimentary & Volcanic)
Triassic (Sedimentary & Volcanic)
Palaeozoic
Intrusives (Mostly Devonian)
Permian
Carboniferous
Devonian
Silurian
Ordovician
Cambrian
Precambrian
Basic Intrusives
Acid Intrusives (Granite, etc)
Late Precambrian or Early Cambrian
Late Precambrian (Animikie & Keweenawan)
Early Precambrian Sedimentary & Volcanic Formations (Cobalt, Bruce, Grenville, Keewatin, etc)
Unclassified (Chiefly Palaeozoic)



CHARACTERISTIC LIFE	TYPICAL DIAGRAMMATIC SECTION OF THE EARTH'S CRUST	CHARACTERISTIC ROCKS
AGE OF MAN	Quaternary	clay, sand, and gravel
AGE OF MAMMALS AND MODERN PLANTS	Tertiary	shales and sandstones
AGE OF REPTILES	Cretaceous	shale and sandstone coal, shale, and sandstone
	Jurassic	sandstone limestone sandstone
	Triassic	shale and sandstone conglomerate shale and sandstone
AGE OF AMPHIBIANS AND LYCOPODS (MOSS-LIKE TREES)	Carboniferous	coal, shale, and sandstone shale and sandstone limestone sandstone limestone
AGE OF FISHES	Devonian	shale and limestone sandstone shale and limestone
	Silurian	limestone shale and sandstone
AGE OF HIGHER (SHELLED) INVERTEBRATES	Ordovician	shale limestone shale limestone
	Cambrian	limestone shale and limestone sandstone
AGE OF PRIMITIVE INVERTEBRATES AND ALGÆ	Precambrian	schistose rocks granite

cou
ave
area
is th
as th
of p
of 1
The
coas
10,0
the
by
the
vall
Coa
mou
of r
ove

The
zoic
rock
or
earl
lain
Ter
stra

mar
lim
thes
the
with
of n
sedi
regi
don

Roc
and
whe
And
Nat
Ord
Yuk
who

several thousand feet thick, were deposited. In the western part of the Rocky mountains they in places succeed Silurian beds, but in the south and at various places in the eastern part of the Rockies they rest on late Precambrian or Cambrian strata. Carboniferous beds succeed the Devonian strata at many places in the Rockies. Around Banff they include a thickness of 5,000 feet. In the interior belt around Kootenay lake Carboniferous beds rest directly on Precambrian rocks.

During the Triassic and Jurassic, sedimentation and volcanism on a vast scal occurred in the region from the Rocky mountains westward to the Pacific ocean, and on the site of what are now Vancouver island and the Queen Charlotte islands. In late Jurassic and early Cretaceous times this whole region was deformed. The Selkirk and Coast ranges were produced and the Coast Range batholith was intruded. In later Cretaceous time, sediments were deposited on both sides of these Jurassic ranges.

Long continued erosion in late Cretaceous time reduced the mountains to a peneplain and unroofed their granite cores. During the Eocene occurred the great Laramide revolution which produced the Rocky mountains. The rocks of this belt were folded and faulted and in places great blocks of older rocks were thrust over younger beds. Local intrusions of igneous rock accompanied the deformation. In the Oligocene local movements accompanied by igneous intrusions again took place. During the Miocene period great fissure eruptions took place while during the succeeding Pliocene period there was further volcanism with general uplift and subsequent valley cutting. In the Pleistocene or Glacial period most of the Cordilleran Region with the exception of some of the higher ridge tops was covered by what is known as the Cordilleran ice sheet. The whole region was depressed at this time but in post-glacial time there has been uplift ranging from 450 to 1,000 feet.

The Cordilleran Region is a great mineral area. Most of the deposits are related to the Coast Range batholith. They occur principally along the borders of the batholith and in the older rocks surrounded by the intrusives and were produced by mineralizing solutions given off from the igneous masses. Some of the more important deposits are the copper ores of Hidden Creek, Britannia, and Allenby mountain, the gold-silver deposits of Salmon River district, the silver-lead-zinc ores of the Slocan, and the Sullivan ore body, the largest silver-lead-zinc mine in the world. Other mineral deposits include coal which occurs in the Rocky mountains and on Vancouver island in beds of Cretaceous and also of Tertiary age, iron ores in Vancouver and Queen Charlotte islands, placer gold in Yukon and in the Cariboo country in gravels of Tertiary age, and numerous other mineral occurrences.

Section 2.—Economic Geology.

An article on this subject, prepared by F. J. Alcock, Ph.D., Mines and Geology Branch, Department of Mines and Resources, Ottawa, appeared at pp. 16-28 of the 1937 Year Book.

PART III.—SEISMOLOGY IN CANADA.

An article on this subject, prepared by Ernest A. Hodgson, Ph.D., of the Dominion Observatory, Department of Mines and Resources, appeared at pp. 27-30 of the 1938 Year Book.

PART IV.—THE FLORA OF CANADA.

An article on this subject, together with a bibliography, prepared by John Adams, M.A. (Cantab.), Division of Botany, Experimental Farm, Ottawa, appeared at pp. 30-59 of the 1938 Year Book.

PART V.—FAUNAS OF CANADA.

An article under this heading, by Rudolph M. Anderson, Ph.D., Chief, Division of Biology, Department of Mines and Resources, appeared at pp. 29-52 of the 1937 Year Book.

PART VI.—LANDS, SCENIC, AND GAME RESOURCES OF CANADA.

Canada is distinctly a new country, and her resources are for the most part in the early stages of development. The fur, fishery, and forest resources have, it is true, been the basis of trade for two or three hundred years, but exploitation on the present commercial scale is of relatively recent growth. A notable feature, especially in so young a country, has been the effort directed to conservation and, in the cases of those resources which admit of such methods, the actual replenishment or augmentation of the sources of supply by the practice of reforestation, sylviculture, fur farming, or the establishment of fish hatcheries.

Numerous surveys and investigations of the extent and value of the resources have been made and broad outlines of the resources of the provinces supplement the information on physical geography given on pp. 1 to 14. Detailed information regarding individual natural resources will be found in the later chapters—Agriculture, Furs, Fisheries, Forestry, Minerals, Water Powers—of this volume.

The treatment of resources considered below is concerned only with those phases of the subject which can be properly regarded as falling under the definition of physiography used in its wider interpretation, and which do not specifically relate to individual subjects, treated elsewhere in this volume. A classification of lands resources (here there is naturally overlapping since much land suitable for agriculture remains under forest cover), information on the National Parks, and resources in game and scenery properly fall under this head.

Lands Resources.—Table 1 presents a broad classification of the potential lands resources of Canada, by provinces. The figures are, in the main, based on estimates prepared by the Dominion Forest Service, Lands, Parks, and Forests Branch, and by the Surveyor General and Chief, Hydrographic and Map Service of the Surveys and Engineering Branch, Department of Mines and Resources; they show how the total land area of Canada is made up as between present and potential agricultural lands, present and potential forest lands, and lands which are unproductive as regards surface resources. Between the totals of present and potential agricultural lands and the totals of present and potential forest lands there is, of course, duplication to the extent of the agricultural lands under forest.

1.—Land Area of Canada, Classified as Agricultural, Forested, or Unproductive.

NOTE.—The land area of Canada is shown classified by tenure in Chapter XXVIII.

Description.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.
Agricultural Land (Present and Potential)—	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
Occupied	*1,861*	*6,722*	*6,488*	*27,038*	*35,689*	*23,644*
Improved and pasture	1,331	2,811	2,686	17,608	28,342	20,489
Forested	530	3,911	3,802	9,430	7,347	3,155
Unoccupied	*105*	*5,922*	*10,259*	*41,314*	*67,181*	*26,950*
Grass, brush, etc	25	2,922	759	1,314	7,181	10,950
Forested	80	3,000	9,500	40,000	60,000	16,000
Totals, Agricultural Land[1]	**1,966**	**12,644**	**16,747**	**68,352**	**102,870**	**50,594**
Non-forested	1,356	5,733	3,445	18,922	35,523	31,439
Forested	610	6,911	13,302	49,430	67,347	19,155
Forested Land—						
Productive	725	11,950	21,773	303,500	170,000	30,500
Unproductive	[2]	50	189	70,000	70,000	62,500
Tenure Classification—						
Privately owned	723	10,473	11,100	31,048	7,972	8,500
Crown land	2	1,527	10,862	342,452	232,028	84,500
Size Classification—						
Merchantable	485	7,470	13,383	213,500	56,100	4,615
Young growth	240	4,480	8,390	90,000	113,900	25,885
Type Classification—						
Softwood	725	8,000	8,329	218,400	65,000	10,950
Mixed wood	[2]	1,150	11,223	66,100	83,000	6,220
Hardwood	[2]	2,800	2,221	19,000	22,000	13,330
Totals, Forested Land	**725**	**12,000**	**21,962**	**373,500**	**240,000**	**93,000**
Net Productive Land[3]	**2,081**	**17,733**	**25,407**	**392,422**	**275,523**	**124,439**
Waste and Other Land[4]	**103**	**3,010**	**2,066**	**131,112**	**87,759**	**95,284**
Totals, Land Area	**2,184**	**20,743**	**27,473**	**523,534**	**363,282**	**219,723**

Description.	Saskatchewan.	Alberta.	British Columbia.	Yukon and N.W.T.	Canada.
	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
Agricultural Land (Present and Potential)—					
Occupied	*86,989*	*60,901*	*5,534*	*7*	*254,873*
Improved and pasture	81,508	54,817	3,640	4	213,236
Forested	5,481	6,084	1,894	3	41,637
Unoccupied	*38,127*	*75,740*	*15,166*	*14,063*	*294,827*
Grass, brush, etc	15,127	30,740	5,760	10,063	84,841
Forested	23,000	45,000	9,406	4,000	209,986
Totals, Agricultural Land[1]	**125,116**	**136,641**	**20,700[5]**	**14,070**	**549,700**
Non-forested	96,635	85,557	9,400	10,067	298,077
Forested	28,481	51,084	11,300	4,003	251,623
Forested Land—					
Productive	42,160	93,075	85,780	10,000	769,463
Unproductive	40,000	37,560	123,760	50,000	454,059
Tenure Classification—					
Privately owned	6,250	10,044	15,000	3	101,113
Crown land	75,910	120,591	194,540	59,997	1,122,409
Size Classification—					
Merchantable	7,305	20,680	36,010	1,000	360,548
Young growth	34,855	72,395	49,470	9,000	408,915
Type Classification—					
Softwood	8,900	31,770	85,780	4,500	442,354
Mixed wood	9,395	40,800	[2]	3,250	221,138
Hardwood	23,865	20,505	[2]	2,250	105,971
Totals, Forested Land	**82,160**	**130,635**	**209,540**	**60,000**	**1,223,522**
Net Productive Land[3]	**178,795**	**216,192**	**218,940**	**70,067**	**1,521,599**
Waste and Other Land[4]	**59,180**	**32,608**	**140,339**	**1,393,496**	**1,944,957**
Totals, Land Area	**237,975**	**248,800**	**359,279**	**1,463,563**	**3,466,556**

[1] These totals embrace present agricultural land of all possible classes and land which has agricultural possibilities in any sense. [2] Very small or negligible. [3] Total agricultural land plus forested land, minus forested agricultural land. [4] Includes open muskeg, rock, road allowances, urban land, etc. [5] An estimate from provincial sources places the total area of land suitable for tillage at 6,626 sq. miles.

National Parks of Canada.*—The Dominion Government maintains, as the medium through which some of the most outstanding natural beauties of the country may be preserved and popularized, the National Parks Bureau, Lands, Parks, and Forests Branch of the Department of Mines and Resources, which administers the scenic and recreational parks set aside for this purpose. Under the supervision of this same body are the national wild-animal preserves—large fenced areas established for the protection and propagation of species in danger of extinction—the national historic parks, and the historic sites of great national interest which have been acquired throughout the country. (See pp. 78 to 90 of the 1938 Year Book.)

The mountain parks include regions of unsurpassed grandeur in the Rocky and Selkirk mountains of Western Canada. Among these are the Banff, Jasper, and Waterton Lakes National Parks in Alberta, located on the eastern slopes of the Rockies; the Kootenay and Yoho parks in British Columbia on the western slopes of the Rockies; and the Glacier and Mount Revelstoke Parks, also in British Columbia, located in the Selkirks. While these parks have a general resemblance to each other, each possesses individual characteristics, varying flora and fauna, and different types of scenery.

Prince Albert National Park in Saskatchewan forms a typical example of the lake country bordering the northwestern prairies, and the Riding Mountain National Park in Manitoba, having a general elevation of 2,000 feet above sea-level, contrasts sharply with the fertile plains to the east. In Ontario are located three small park units, the Point Pelee, Georgian Bay Islands, and the St. Lawrence Islands National Parks, which were established primarily as recreational areas. Fort Anne National Park in Nova Scotia and Fort Beauséjour National Park in New Brunswick, surround sites notable in early Canadian history.

The most recent additions to the system of National Parks are located in the Maritime Provinces. Cape Breton Highlands National Park, an area of 390 square miles, is situated in the northern part of Cape Breton island between the gulf of St. Lawrence and the Atlantic ocean. Its rugged and picturesque shore line, and its mountainous interior which greatly resembles the Highlands of Scotland, are accessible from Cheticamp and Ingonish by a spectacular motor road called the Cabot Trail. Prince Edward Island National Park, containing an area of seven square miles, extends for a distance of twenty-five miles along the northern shore of Prince Edward island. Outstanding among its features are beautiful sand beaches, among the finest in eastern Canada, which offer unrivalled opportunities for surf-bathing. The provision of recreational facilities, including golf courses and bath-houses, is being carried out in the orderly development of these park areas.

The special animal parks were established for the protection of such vanishing species of mammalian wild life as the buffalo, wapiti (elk), and pronghorned antelope, which now thrive under natural conditions in large enclosures especially suited to their requirements. These parks include the Buffalo and Elk Island parks in Alberta, which contain large herds of buffalo, elk, moose, and deer, and the Nemiskam park also in Alberta, which forms a sanctuary for the pronghorned antelope.

In the national parks all wild life is given rigid protection and primal natural conditions are maintained as far as possible. The local administration of the larger parks is carried out by resident superintendents, assisted by park wardens who are responsible for the necessary game and forest patrols. Recreational facilities are many and varied, and in some parks natural attractions have been augmented by the provision of golf courses, tennis courts, swimming pools, bath-houses, and other features. A number of the parks also possess well-equipped public camp grounds, which are available to visitors desiring this type of accommodation.

---

* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

In addition to being served by the Canadian Pacific or Canadian National Railway systems, most of the parks are either traversed by or linked up with the main arteries of motor travel. More than 600 miles of all-weather motor roads have been built by the National Parks Bureau, which have been instrumental in opening up many of the outstanding beauty spots, while other regions have been made accessible by the construction of more than 2,800 miles of trails.

Migratory Birds Treaty.—This treaty and the legislation making it effective throughout Canada are administered by the National Parks Bureau of the Department of Mines and Resources. The treaty, which has been effective since 1916, has as its object the protection of the valuable migratory bird life of Canada and the United States. Information concerning the treaty, and regulations enacted for its enforcement, may be obtained from the Controller, National Parks Bureau, Ottawa.

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1938.

(Twenty-one in number with a total area of 29,700 square miles.)

Park.	Location.	Date Established.	Area.	Characteristics.
			sq. miles. (approx.)	
Scenic Parks.				
Banff	Western Alberta, on east slope of Rockies.	1885	2,585·00	Mountain playground containing two famous resorts—Banff and Lake Louise. Massive ranges, upper slopes bare and worn, or glacier crowned, lower slopes covered with luxuriant forests and flowered alplands; glacier-fed lakes. Wild deer, goat, sheep, elk, etc. Recreations—alpine climbing, riding, swimming, golf, tennis, motoring, fishing, skiing, skating, curling.
Yoho	Eastern British Columbia, on west slope of Rockies.	1886	507·00	Rugged scenery on west slope of Rockies; Kicking Horse valley; lofty peaks, large number with permanent ice-caps or glaciers; famous Yoho valley with numerous waterfalls, one over 1,200 feet in height. Natural bridge, Emerald lake, lakes O'Hara and McArthur.
Glacier	Southeastern British Columbia, on the summit of the Selkirk range.	1886	521·00	Massive formations of the old Selkirk range; luxuriant forests, alpine flower gardens. Centre for alpine climbers. Illecillewaet and Asulkan glaciers and valleys; Nakimu caves. Marion lake, Rogers and Baloo passes.
Mount Revelstoke	Southeastern British Columbia, on the summit of mount Revelstoke.	1914	100·00	Nineteen-mile drive up Mt. Revelstoke affording panoramic views of the Columbia and Illecillewaet valleys, Clachnacudainn ice-field, lakes Eva and Millar. Game sanctuary and winter sports resort.
Kootenay	Southeastern British Columbia, along Banff-Windermere highway.	1920	587·00	Park extends five miles on each side of Vermilion-Sinclair section of Banff-Windermere highway. Deep canyons, Iron Gates, Briscoe range, Sinclair canyon, famed Radium Hot Springs. Bear, deer, caribou, and Rocky Mountain sheep.
Jasper	Western Alberta, on east slope of Rockies.	1907	4,200·00	Immense mountain wilderness, rich in historical associations. Numbers of unclimbed peaks; glaciers, canyons, lakes of wonderful colouring; Athabaska valley, Maligne lake, Mount Edith Cavell; Miette Hot Springs; Columbia ice-field; big game sanctuary. Recreations—alpine climbing, riding, swimming, golf, tennis, motoring, fishing.

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1938—continued.

Park.	Location.	Date Established.	Area.	Characteristics.
			sq. miles.	
Scenic Parks—con.				
Waterton Lakes	Southern Alberta, adjoining Glacier Park in Montana, U.S.A.	1895	220·00 (approx.)	Canadian section, Waterton-Glacier International Peace Park. Mountains noted for beauty of colouring; lovely lakes, picturesque trails, waterfalls, trout fishing, camping, Government golf course.
St. Lawrence Islands.	In St. Lawrence river between Morrisburg and Kingston, Ontario.	1904	185·60 (acres)	Thirteen islands among the "Thousand Islands" in the St. Lawrence river. Recreational area, camping, fishing.
Point Pelee	Southern Ontario, on lake Erie.	1918	6·04	Most southerly mainland point in Canada, 41° 54′ N. Resting place of many migratory birds; unique flora. Recreational area, camping, bathing.
Georgian Bay Islands (including Flowerpot Island Reserve)	In Georgian bay, near Midland, Ontario.	1929	5·37	Thirty islands in Georgian Bay; Beausoleil, largest of the group, is a popular camping resort. Fine bathing beaches, beautiful groves of trees, varied bird and plant life. Flowerpot island, at head of Bruce peninsula, has interesting limestone formations and numerous caves.
Riding Mountain	Southwestern Manitoba, west of lake Winnipeg.	1929	1,148·04	Rolling woodland country in western Manitoba dotted with several beautiful lakes. Natural home of big game including one of the largest herds of wild elk in Canada. Summer resort, fine bathing and camping, Government golf course.
Prince Albert	Central Saskatchewan, north of Prince Albert.	1927	1,869·00 (approx.)	Forest country of northwestern Canada, birch, spruce, jack pine, poplar; lakes and streams; moose, deer, bear, beaver, and interesting bird life. Excellent fishing—northern pike, pickerel, and lake trout; summer resort; sand beaches, camp grounds, Government golf course.
Cape Breton Highlands.	Northern part of Cape Breton island.	1936	390·00 (approx.)	Outstanding examples of rugged coast-line with mountain background. Magnificent views of Atlantic ocean and gulf of St. Lawrence. Deep-sea fishing; camping; Government golf course.
Area in Prince Edward Island.	North shore of Prince Edward island.	1936	7·00	Strip approximately twenty-five miles long on north shore. Some of finest bathing beaches in Eastern Canada. Government golf course.
National Parks Tar Sands Reservation.[1]	Alberta	1926	2,068·20 (acres)	Four areas comprising in all 2,068 acres in the Fort McMurray District, Alberta, have been reserved for the National Parks Branch to provide a supply of tar sands for road construction purposes in the National Parks.
Animal Parks and Reserves.				
Buffalo	Eastern Alberta, near Wainwright.	1908	197·50	Fenced enclosure; home of the Dominion Government buffalo herd. Over 3,000 buffalo, also moose, deer, elk, yak, and hybrids.
Elk Island	Central Alberta, near Lamont.	1911	51·20	Fenced enclosure, containing approximately 2,000 buffalo, also moose, elk, and deer; recreational area, camping, bathing. Government golf course.
Nemiskam	Southern Alberta, near Foremost.	1922	8·50	Fenced pronghorned antelope reserve, containing more than 300 head of this interesting animal, a species indigenous to the region.

---

[1] For footnote see end of table, p. 31.

2.—Details Regarding Locations, Dates Established, Areas, and Characteristics of the National Parks of Canada and Dominion Reserves, 1938—concluded.

Park.	Location.	Date Established.	Area.	Characteristics.
			sq. miles.	
Animal Parks and Reserves—concl.				
Wood Buffalo[2]........	Partly in Alberta (13,675 sq. miles) and partly in Northwest Territories (3,625 sq. miles), west of Athabaska and Slave rivers.	1922	17,300·00 (approx.)	Forests interspersed with rivers and open plains. Dotted with innumerable lakes and streams. The home of the wood buffalo, moose, deer, caribou, bear, beaver; waterfowl abundant. Area as yet undeveloped.
Historic Parks.				
Fort Anne............	Nova Scotia........ (Annapolis Royal)	1917	31·00 (acres)	Site of early Acadian settlement of Port Royal; museum containing interesting relics of early days and fine historical library.
Fort Beauséjour......	New Brunswick, near Sackville.	1926	59·00 (acres)	Site of old French fort erected middle of 18th century. Renamed Fort Cumberland in 1755 by British; original name was later restored. Historical museum containing interesting exhibits.

[1] Reserved by Order in Council and became a Dominion reserve by agreement with the Government of Alberta in 1931. [2] Administered by the Bureau of Northwest Territories and Yukon Affairs of the Lands, Parks, and Forests Branch, Department of Mines and Resources.

Provincial Parks.—In addition to the national parks throughout Canada administered by the Dominion Government, most of the provinces also maintain provincial parks for the protection of wild life and as recreational areas. Among the largest of these are the Algonquin Park (2,740 square miles) in Ontario, and the Laurentides Park (3,565 square miles) in Quebec.

Game and Scenery.—The resources of Canada from the standpoints of the sportsman and tourist are both unique and varied. Owing to the growth of tourist travel and its demands (the statistics of the tourist trade are dealt with in Chapter XVI as a phase of External Trade), great areas of uninhabited land have become accessible, and hitherto almost unknown parts may now be reached and traversed with ease. In the wooded and unsettled areas of every province there are many moose, deer, bear, and smaller game, while in the western parts of the Dominion there are also wapiti, caribou, mountain sheep, mountain goat, grizzly bear, and lynx. Mountain lion, or cougar, are found in British Columbia and in the mountains of Alberta, while in the northwest and the far north there still exist herds of buffalo and musk-ox, which, however, are given absolute protection by the Dominion Government.

Ruffed and spruce grouse are found in the wooded areas of Canada from coast to coast. Prairie chicken and Hungarian partridge inhabit the open prairies and the partly timbered areas of the three mid-western provinces. Franklin grouse are native to the mountains of the west and the ptarmigan, an Arctic grouse, lives in the treeless northern plains and is also found in the high mountains of Alberta and British Columbia.

Canada is the natural habitat of many kinds of waterfowl and it is difficult to imagine any finer field for the shot-gun sportsman than is afforded by many of the myriad lakes which form so large a feature of Canadian scenery. This is particularly true of the three mid-western provinces, where the lakes are of the shallow, surface type that furnishes the most abundant feed for waterfowl.

The valleys of Nova Scotia and New Brunswick, the broken lake country of northern Quebec, Ontario, Manitoba, and Saskatchewan, as well as the mountain districts of British Columbia and Alberta, offer to the tourist, the hunter, and the fisherman new scenic effects and innumerable game preserves, and have won for the Dominion a reputation as a paradise for sportsmen and campers. And not only is this possible for those who travel by land; the series of lakes and rivers which form a network over the eastern part of the country particularly, has made water travel in smaller craft both feasible and attractive. Further, facilities for winter sports, the unusual attractions of winter scenery and the bracing though rigorous winter climate, have done much to add to the reputations of resorts formerly noted for their advantages in the summer season. In both Dominion and provincial parks, while angling is permitted, the hunting of game is forbidden, and the wild-life resources preserved. Elsewhere, however, there is available for the hunter, at proper seasons, a wealth of game species.

PART VII.—CLIMATE AND METEOROLOGY.

Section 1.—The Climate of Canada.

An article on this subject by Sir Frederick Stupart, at that time Director of the Dominion Meteorological Service, Toronto, appeared in the 1929 edition of the Year Book at pp. 42-51.

Section 2.—The Factors which Control Canadian Weather.

Under the above heading, Sir Frederic Stupart, at that time Director of the Dominion Meteorological Service, Toronto, contributed an article which appeared at pp. 26-31 of the 1924 edition of the Year Book, also at pp. 36-40 of the 1925 edition.

Section 3.—The Distribution of Precipitation in Canada.

An article on "The Distribution of Precipitation in Canada", contributed by A. J. Connor, Climatologist, Dominion Meteorological Office, Toronto, appeared at pp. 42-46 of the 1926 edition of the Year Book.

Section 4.—The Temperature and Precipitation of Northern Canada.

An article on the climate of northern Canada, accompanied by meteorological tables showing the normal temperature and precipitation at selected northern stations, was contributed by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, to the 1930 edition of the Year Book, where it will be found at pp. 41-56.

Section 5.—The Meteorological Service of Canada.

Under the above heading Sir Frederic Stupart contributed a short article descriptive of the growth and present activities of the Meteorological Service, to the 1922-23 edition of the Year Book (pp. 43-47); to it the interested reader is referred.

Section 6.—Meteorological Tables.

An article accompanied by tables giving the times of sunrise and sunset for places in certain latitudes across Canada appeared at pp. 66-68 of the 1938 Year Book.

Section 7.—Droughts in Western Canada.

An article on the above subject by A. J. Connor, of the Meteorological Service of the Department of Marine, Toronto, accompanied by diagrams and tables showing the precipitation and sun-spot incidence in the Prairie Provinces, appeared at pp. 47-59 of the 1933 edition of the Year Book.

Section 8.—Standard Time and Time Zones in Canada.

A summary, based on a paper "Standard Time and Time Zones in Canada", by C. C. Smith, Dominion Observatory, Ottawa, accompanied by a map diagram, appeared at pp. 50-53 of the 1934-35 edition of the Year Book.

CHAPTER II.—HISTORY AND CHRONOLOGY.

PART I.—HISTORY.

Section 1.—The Relationship of the Department of Public Archives to the Historical Records of Canada.*

The Public Archives of Canada is a national institution. Created in 1872, it is directed by a Deputy Minister and attached to the Department of the Secretary of State. Its primary function is the custody and care of all inactive records of the Government that possess administrative value or historical interest. A secondary purpose is to gather public and private material relating to the history of the country in its broadest sense. Consequently, the objectives of the Archives are: first, to preserve such records and material for present and future generations; and secondly, to make them available to government officials, students of history, and general inquirers.

In the Archives are kept the commissions, proclamations, constitutions, acts, charters, and treaties in which are recorded and defined our national and provincial boundaries as well as our constitutional and political rights. There are deposited also numerous land grants, deeds, and surveys through which ownership is established on behalf of governments, institutions, and citizens. There too, in public or private records, will be found much information concerning public men as well as private persons. Thus in the Archives vital interests of the country, of institutions, and of individuals are preserved and safeguarded.

Unlike its European counterparts, the Canadian Archives has not limited itself to official records: it has also assembled all kinds of documentary material, manuscripts, maps, pictures, books, and historical articles, which are classified and grouped in their respective divisions.

The work of the Archives is at present organized under five divisions and an Administrative Section headed by the Dominion Archivist. These Divisions are: the Manuscript Division, the Map Division, the Print Division, the Library Division, and the Museum Division.

By its very nature, the Manuscript Division is that which essentially constitutes the Archives. It comprises, on the one hand, numerous and extensive series of official records of governments and, on the other, many collections of public and private papers. Together these embrace the basic material of the country's history. Constantly growing through transfers, donations, and purchases, the records include over thirty thousand large volumes and portfolios. It is inexpedient here to describe these series and collections, or even to enumerate them; it will suffice to indicate the main subject matters of their contents.

First, are to be found the instructions to and reports of those who discovered and explored our country; then follow the commissions and instructions which, under French rule, established the system of government and prescribed the duties of those who administered it. Next come the innumerable dispatches which passed between the Governors and the Intendants in Canada and the Ministers in France, dealing with every detail of the military, economic, and social life of the colony. To these must be added narratives of Indian and British wars leading up to the conquest of the country.

---

* Contributed by Dr. Gustave Lanctot, LL.M., D.Litt., LL.D., K.C., F.R.S.C., Deputy Minister and Dominion Archivist.

Under British rule, documentary material begins with the correspondence between the Governors and the Ministers in London, in which can be traced the political evolution that brought us from the position of a colony to the status of a Dominion. There also are contained the records of our economic progress in terms of population, business, fur trade, fisheries, agriculture, industry, transport and means of communication, handicrafts, etc. These collections also comprise material relating to religious and educational matters, and to Indian missions, as well as information concerning public works, social assistance, hospitals, alms-houses, immigrants, etc. Thus from the countless papers of the Manuscript Division the story of the political, economic, military, religious, and social life of our country can be reconstructed.

The Map Division of the Archives contains more than twenty thousand maps, charts, plans, and drawings. In addition to their historical value maps are required to visualize a country, to show the adaptation of a human group to its habitat, and to interpret the economic, military, and social evolution of a people. The oldest American map goes back to the year 1500 and was made by Juan de la Cosa eight years after the discovery of the New World. Together with geographical maps can also be seen military, naval, geological, and demographic maps and charts, as well as plans and drawings of public buildings and military works. No end of information can be gathered from the proper reading of such valuable material.

As more and more interest is being attached in historical writing to contemporary representation of the men and scenes of the past, the Print Division of the Archives aims at bringing together iconographic records relating to Canada, past and present. It includes engravings, paintings, aquarelles, lithographs, drawings, photographs, and sculpture. It is rich in portraits, and still more so in representations of scenes, buildings, costumes, and sites. About forty-eight thousand pictures have now been catalogued. With the object of assisting in the teaching of Canadian history, a collection of lantern-slides has been formed and is available for loan to responsible teachers and lecturers in Canada.

The Library Division has a no less useful part in the service rendered by the Archives. So close to the Library of Parliament, it aims merely at assembling works, chiefly documentary, such as are indispensable to the study of Canadian history. Its purpose is to provide members of the staff, historians, students, and other inquirers with a good reference library of historical compilation and literature that may supply them with the required information, and facilitate the making of researches. The library now contains more than forty thousand volumes. The pamphlet section of approximately eleven thousand volumes, with its four thousand items printed between 1600 and 1867, merits special attention. Mention should be made of the Library's collection of old Canadian newspapers, including the *Gazette* of Quebec, which first appeared in 1764.

The Museum Division completes, so to speak, the part which the Archives plays in preserving such materials as are available for reconstructing the past. It contains all manner of objects possessing historic interest, such as flags, furniture, uniforms, medals, arms, coins, personal articles, etc., in exhibition rooms open to visitors.

To make its contents known to the public, the Department has issued since 1872 annual reports containing lists of the material acquired during the year, as well as inventories with indexes of the principal collections. Finally, the Archives has published several volumes of documents relating to the constitution, to discoveries and economics, and certain guides and catalogues of the divisions.

The Archives places all its material at the service of the public. Anyone may present himself, and be admitted to consult the documents in the Students' Room specially appointed for this purpose. The help and experience of the staff may also be obtained by inquirers in their research work. For those who cannot make the journey to Ottawa, there remains the easy method of correspondence, as the Department will provide, when practicable, the desired information.

Section 2.—Outlines of Canadian History.

The late Sir Arthur Doughty prepared an outline of the history of Canada which appeared in the 1913 Year Book, pp. 1-29, and in somewhat abridged form in the 1922-23 Year Book, pp. 60-80.

A special article "Canada on Vimy Ridge", prepared by Colonel A. Fortescue Duguid, D.S.O., B.Sc., R.C.A., Director of the Historical Section, Department of National Defence, was published at pp. 50-60 of the Canada Year Book, 1936.

A special article "Historic Sites and Monuments in Canada" was published at pp. 78-90 of the 1938 edition of the Year Book.

Section 3.—A Bibliography of Canadian History.*

A select bibliography of historical works relating to Canada was contributed to the 1925 edition of the Year Book by the late Adam Shortt. The following, although still purposely short, is a more extended and eclectic bibliography compiled for the benefit of the general reader and restricted to authoritative books on general topics.

General.

AUDET, FRANCIS J. Canadian Historical Dates and Events, 1492-1815. Ottawa, George Beauregard, 1917.

BIGGAR, H. P. The Early Trading Companies of New France. Toronto, University of Toronto Library, 1901.

BLACK, NORMAN FERGUS. A History of Saskatchewan and the Old North West. Second Edition. Regina, North West Historical Company, 1913.

BOUCHETTE, JOSEPH. The British Dominions in North America; or, a Topographical and Statistical Description of the Provinces of Lower and Upper Canada, New Brunswick, Nova Scotia, the Islands of Newfoundland, Prince Edward, and Cape Breton. 2 vols. London, Longman, Rees, Orme, Brown, Green, and Longman, 1832.

BORDEN, SIR R. L. Canadian Constitutional Studies. Toronto, University of Toronto Press, 1922.

BOYD, JOHN. Sir George Etienne Cartier, Bart., his life and times. Toronto, The Macmillan Company of Canada, 1914.

BRACQ, J. C. The Evolution of French Canada. New York, The Macmillan Company, 1924.

BURPEE, LAWRENCE J. The Search for the Western Sea, The Story of the Exploration of North-western America. Toronto, The Musson Book Company, Limited, 1908.

Cambridge History of the British Empire. Edited by J. Holland Rose, A. P. Newton, and E. A. Benians. Vol. VI. Canada and Newfoundland, Adviser for the Dominion of Canada, W. P. M. Kennedy; Cambridge, The University Press, 1930.

CAMPBELL, DUNCAN. History of Prince Edward Island. Halifax, 1875.

Canada and Its Provinces. A History of the Canadian People and their Institutions. Adam Shortt and Arthur G. Doughty, general editors. 23 vols. Toronto, Edinburgh University Press, 1917.

---

* Prepared by Dr. Gustave Lanctot, LL.M., D.Litt., LL.D., K.C., F.R.S.C., Deputy Minister and Dominion Archivist.

Canniff, Wm. History of the Settlement of Upper Canada, (Ontario), with special reference to The Bay of Quinté. Toronto, Dudley and Burns, 1869.

Chapais, Thomas. Cours d'histoire du Canada, 1760-1867. 8 vols. Québec, Garneau, 1919-1934.

Charlevoix, R. P. Histoire et Description Générale de la Nouvelle-France, avec le Journal Historique d'un Voyage fait par ordre du Roi dans l'Amérique Septentrionale. 3 vols. Paris, Rolin fils, 1744.

Creighton, D. G. The Commercial Empire of the St. Lawrence, 1760-1850. Toronto, The Ryerson Press, 1937.

Christie, Robert. A History of the Late Province of Lower Canada. 6 vols. Quebec, Montreal, 1848-1866.

Davidson, Gordon Charles. The North West Company. (University of California Publications in History, vol. VII.) Berkeley, University of California Press, 1919.

Dawson, S. E. The St. Lawrence, Its Basin and Borderlands. New York, Stokes Company, 1905.

Dent, J. C. Last Forty Years. 2 vols. Toronto, George Virtue, 1881.

Egerton, H. E. Canada, Part II, Historical, 1763-1921. (Historical Geography of the British Colonies.) Oxford, The Clarendon Press, 1923.

Egerton, H. E. and Grant, W. L. Canadian Constitutional Development Shown by Selected Speeches and Despatches. With introduction and explanatory notes. London, John Murray, 1907.

Fauteux, Joseph-Noël. Essai sur l'industrie au Canada sous le régime français, 2 vols. Québec, Proulx, 1927.

Garneau, F. X. Histoire du Canada. 5e édition, revue, annotée et publiée, avec une introduction et des appendices, par son petit-fils Hector Garneau. Préface de M. Gabriel Hanotaux. 2 vols. Paris, Librairie Félix Alcan.

Glazebrook, G. P. de T. A History of Transportation in Canada. Toronto, The Ryerson Press, 1938.

Gourlay, Robert. Statistical Account of Upper Canada. Compiled with a view to a Grand System of Emigration. 2 vols. and introduction. London,, Simpkin and Marshall, 1822.

Gray, Hugh. Letters from Canada, showing the Present State of Canada, its Productions, Trade, Commercial Importance and Political Relations. London, Longman, Hurst, Rees, and Orme, 1809.

Haliburton, Thomas C. An Historical and Statistical Account of Nova Scotia. 2 vols. Halifax, Joseph Howe, 1829.

Guillet, Edwin C. The Lives and Times of the Patriots. Toronto, Nelson and Sons, 1938.

Guillet, Edwin C. Early Life in Upper Canada. Toronto, Ontario Publishing Company, 1933.

Hannay, James. The History of New Brunswick. 2 vols. Saint John, N.B., John A. Bowes, 1909.

Heagerty, John J. Four Centuries of Medical History in Canada: And a Sketch of the Medical History of Newfoundland. 2 vols. Toronto, The Macmillan Company of Canada, 1928.

Heriot, George. Travels through the Canadas, with an Account of the Productions, Commerce and Inhabitants of those Provinces. London, printed for Richard Phillips, 1807.

Innis, Harold A. The Fur Trade in Canada: An introduction to Canadian economic history. With a preface by R. M. MacIver. New Haven, Yale University Press, 1930.

Innis, H. A. (Edited by). Select Documents in Canadian Economic History, 1497-1783. Toronto, University of Toronto Press, 1929.

Keenleyside, Hugh. Canada and the United States. With an introduction by W. P. M. Kennedy. New York, Alfred A. Knopf, 1929.

Kennedy, W. P. M. The Constitution of Canada: An Introduction to its Development and Law. Toronto, Oxford University Press, 1922.

Kennedy, W. P. M. (Edited by). Documents of the Canadian Constitution, 1759-1915. Toronto, Oxford University Press, 1919.

Kingsford, William. History of Canada. 10 vols. Toronto, Rowsell and Hutchison, 1887-98.

Lanctot, Gustave. L'Administration de la Nouvelle-France. L'Administration générale. Paris, Honoré Champion, 1929.

Lanctot, Gustave. Le Canada d'hier et d'aujourd'hui. 3e édition. Montréal, Editions Albert Lévesque, 1935.

Lauvrière, Emile. La Tragédie d'un peuple: Histoire du peuple acadien de ses origines à nos jours. 2 vols. Paris, Edition Bossard, 1922.

Livingston, W. Ross. Responsible Government in Nova Scotia: A Study of the Constitutional Beginnings of the British Commonwealth. Iowa City, University of Iowa, 1930.

Lucas, Sir C. P. Canada: Part I, Historical, to 1763. (Historical Geography of the British Colonies.) Oxford, Clarendon Press, 1916.

Lucas, Sir C. P. Lord Durham's Report on the affairs of British North America. Edited with an introduction. 3 vols. Oxford, Clarendon Press, 1912.

MacMechan, A. Headquarters of Canadian Literature. Toronto, McClelland and Stewart, 1924.

Markham, Sir C. R. The Lands of Silence: A History of Arctic and Antarctic Exploration. Cambridge, University Press, 1921.

Martin, R. M. Statistics of the Colonies of the British Empire. From the Official Records of the Colonial Office. 2 vols. First edition, London, London Printing and Publishing Company, 1839. Later editions, 1843, 1847.

Martin, Chester. Empire and Commonwealth: Studies in Governance and Self-government in Canada. Oxford, Clarendon Press, 1929.

McLennan, J. S. Louisbourg from its Foundation to its Fall, 1713-1758. London, Macmillan and Company, 1918.

Middleton, Jesse Edgar, and Landon, Fred. The Province of Ontario: A History, 1615-1927. 4 vols. Toronto, Dominion Publishing Company, Limited, 1927.

Munro, William Bennett. The Seigniorial System in Canada. A Study in French Colonial Policy. New York, Longmans, Green, and Company, 1907.

Murdock, Beamish. A History of Nova Scotia, or Acadie. 3 vols. Halifax, James Barnes, 1867. (Vol. 3.)

Newbigin, Marion I. Canada, the Great River, the Lands and the Men. London, Christophers, 1927.

Parkman, Francis. The Works of, Champlain Edition. 20 vols. Boston, Little, Brown, and Company.

Pierce, L. A. An Outline of Canadian Literature. Toronto, Ryerson Press, 1927.

Pope, Sir J. Memoirs of the Rt. Hon. Sir John Alexander Macdonald, G.C.B., First Prime Minister of the Dominion of Canada. 2 vols. Ottawa, J. Durie and Son, 1894.

Salone, E. La colonisation de la Nouvelle-France. Paris, E. Guilmoto, 1906.

Schofield, F. H. The Story of Manitoba. 3 vols. Winnipeg, The S. J. Clarke Publishing Company, 1913.

Scholefield, E. O. S., and Howay, F. W. British Columbia From the Earliest Times to the Present. 4 vols. Vancouver, The S. J. Clarke Publishing Company, 1914.

Siegfried, André. Le Canada: les deux races. Paris, Armand Colin, 1906.

Siegfried, André. Le Canada. Puissance internationale. Paris, Armand Colin, 1937.

Skelton, O. D. The Canadian Dominion. (The Chronicles of America.) New Haven, Yale University Press, 1919.

Skelton, O. D. Life and Letters of Sir Wilfrid Laurier. Illustrated with photographs. 2 vols. Toronto, Oxford University Press, 1921.

Smith, W. L. The Pioneers of Old Ontario. Toronto, Morang, 1923.

Sulte, Benjamin. Histoire des Canadiens-français. 8 vols. Montréal, Wilson et Compagnie, 1882-4.

Todd, Alpheus. Parliamentary Government in the British Colonies. London, Longmans, Green, and Company, 1894.

Turcotte, Louis-P. Le Canada sous l'Union 1841-1867. Québec, De L'Imprimerie de L. J. Demers et Frère, 1882.

Trotter, R. G. Canadian Federation: Its Origins and Achievement; a Study in Nation Building. Toronto and London, J. M. Dent and Sons, 1924.

Warburton, A. B. A History of Prince Edward Island. Saint John, N.B., Barnes and Company, 1923.

Willison, Sir J. S. Sir Wilfred Laurier and the Liberal Party: A Political History. 2 vols. Toronto, George N. Morang and Company Limited, 1903.

Wittke, Carl. A History of Canada. New York, Alfred A. Knopf, 1928.

Works of Samuel de Champlain. In six volumes: reprinted, translated, and annotated by six Canadian scholars under the general editorship of H. P. Biggar. Toronto, The Champlain Society. (3 vols. have appeared to date.)

Wrong, George M. The Rise and Fall of New France. 2 vols. Toronto, Macmillan, 1928.

Reports of Select Committees and Government Departments.

Report of Select Committee on the State of the Civil Government of Canada. London, 1828.

Seventh Report of the Select Committee of the House of Assembly of Upper Canada on Grievances. Toronto, M. Reynolds, 1835.

Canadian North-West. Its Early Development and Legislative Records. Edited by Prof. E. H. Oliver. 2 vols. Ottawa, Government Printing Bureau, 1914-15.

Historic Forts and Trading Posts of the French Régime and of the English Fur Trading Companies. Compiled by Ernest Voorhis. Ottawa, Department of the Interior, 1930. (Mimeograph.)

Parliamentary Debates on the subject of Confederation of the British North American Provinces. Quebec, Hunter, Rose, and Company, 1865.

Precursors of Jacques Cartier, 1497-1534. A Collection of Documents relating to the Early History of the Dominion of Canada. Edited by H. P. Biggar. Ottawa, Government Printing Bureau, 1911.

Report of Israel D. Andrews, Consul of the United States for Canada and New Brunswick, on the Trade and Commerce of the British North American Colonies, and upon the Trade of the Great Lakes and Rivers. Washington, Robert Armstrong, 1853.

Biography.

Dictionary of Canadian Biography. Compiled by W. Stewart Wallace. Toronto, The Macmillan Company of Canada, 1926.

LeJeune, R. P. Dictionnaire général de biographie, histoire, littérature, agriculture, commerce, industrie, etc. Paris, Typographie Firmin-Didor et Compagnie, 1931.

Encyclopædia.

Burpee, Lawrence J. Oxford Encyclopædia of Canadian History. (Makers of Canada, vol. XII.) London and Toronto, Oxford University Press, 1926.

Encyclopædia of Canada. General Editor, W. Stewart Wallace. 6 vols. Toronto, University Associates of Canada, Limited, 1935-38.

Bibliography.

Catalogue of Pamphlets in the Public Archives of Canada, 1878-1931. With Index. Prepared by Magdalen Casey. 2 vols. Ottawa, Kings Printer, 1932.

GAGNON, PHILÉAS. Essai de Bibliographie Canadienne. 2 vols. Montréal, 1895, 1913.

Guide to the Documents in the Manuscript Room of the Public Archives of Canada. Prepared by David W. Parker. Ottawa, Government Printing Bureau, 1915.

Literature of American History, a bibliographical guide in which the scope, character, and comparative worth of books in selected lists are set forth in brief notes by critics of authority. Edited for the American Library Association by J. N. Larned. Boston, Houghton, Mifflin, and Company, 1902.

TROTTER, R. G. Canadian History: A Syllabus and Guide to Reading. Toronto, The Macmillan Company of Canada, 1934.

Geography.

AMI, H. M., ed. North America, vol. I, Canada and Newfoundland. 2nd. ed. revised. London, 1915. (Stanford's Compendium of Geography and Travel. New Issue.)

Atlas of Canada. Department of the Interior. Revised and enlarged edition. Prepared under the direction of J. E. Chalifour, Chief Geographer. Ottawa, The King's Printer, 1915.

BAEDEKER, K. The Dominion of Canada, with Newfoundland and an Excursion to Alaska. Handbook for Travellers. New York, 1922.

BURPEE, LAWRENCE J. Historical Atlas of Canada. Edited with introduction, notes, and chronological tables. Toronto, Thomas Nelson and Sons, Limited, 1927.

PART II.—CHRONOLOGY, 1497 to 1939.

1497. June 24, Eastern coast of North America discovered by John Cabot.

1498. Cabot discovered Hudson strait.

1501. Gaspar Corte Real visited Newfoundland and Labrador.

1524. Verrazano explored the coast of Nova Scotia.

1534. July 24, Jacques Cartier, on his first voyage, erected a cross at Gaspe, claiming the land for the King of France.

1535. Cartier's second voyage. He ascended the St. Lawrence to Stadacona (Quebec), (Sept. 14), and Hochelaga (Montreal), (Oct. 2).

1541. Cartier's third voyage. He planted wheat, cabbages, turnips, and lettuces near Cap Rouge river.

1542-3. De Roberval and his party wintered at cape Rouge, and were rescued by Cartier on his fourth voyage.

1557. Sept. 1, Death of Cartier at St. Malo, France.

1592. Straits of Juan de Fuca discovered by de Fuca.

1603. June 22, Champlain's first landing in Canada, at Quebec.

1604. De Monts settled colony on island in the St. Croix river.

1605. Founding of Port Royal (Annapolis, N.S.).

1608. Champlain's second visit. July 3, Founding of Quebec.

1609. July, Champlain discovered lake Champlain.

1610–11. Hudson explored Hudson bay and James bay.

1611. Brûlé ascended the Ottawa river.

1612. Oct. 15, Champlain made Lieutenant-General of New France.

1613. June, Champlain ascended the Ottawa.

1615. Champlain explored lakes Nipissing, Huron, and Ontario (discovered by Brûlé and Le Caron).

1616. First schools opened at Tadoussac and on the site of the city of Three Rivers.

1617. Arrival at Quebec of the first colonist, Louis Hebert and his family.

1620. Population of New France, 60 persons.

1621. Code of laws issued and register of births, deaths, and marriages opened in Quebec. Nova Scotia granted to Sir William Alexander by King James I.

1622. Lake Superior discovered by Brûlé.

1623. First British settlement of Nova Scotia.

1627. New France and Acadia granted to the Company of 100 Associates.

1628. Port Royal taken by Sir David Kirke.

1629. April 24, Treaty of Susa between France and England. July 20, Quebec taken by Sir David Kirke.

1632. Mar. 29, Canada and Acadia restored to France by the Treaty of St. Germain-en-Laye.

1633. May 23, Champlain made first Governor of New France.

1634. July 4, Founding of Three Rivers.

1634–35. Exploration of the Great Lakes by Nicolet.

1635. Dec. 25, Death of Champlain at Quebec. Founding of the first college at Quebec.

1638. June 11, First recorded earthquake in Canada.
1640. Discovery of lake Erie by Chaumonot and Brébeuf.
1641. Resident population of New France, 240.
1642. May 17, Founding of Ville-Marie (Montreal), by Maisonneuve.
1646. Exploration of the Saguenay by Dablon.
1647. Lake St. John discovered by de Quen.
1648. Mar. 5, Council of New France created.
1649. Mar. 16–17, Murder of Fathers Brébeuf and Lalemant by Indians and massacre of the Hurons.
1650. Population of New France, 675.
1654. August, Acadia taken by an expedition from New England.
1656. Acadia granted by Cromwell to La Tour, Temple, and Crowne.
1659. June 16, François de Laval arrived in Canada as Vicar-Apostolic.
1660. May 21, Dollard des Ormeaux and sixteen companions killed by Iroquois at the Long Sault, Ottawa river.
1663. Company of 100 Associates dissolved. Feb. 5, severe earthquake. April, Sovereign Council of New France established. Population of New France, 2,500, of whom 800 were in Quebec. Foundation of the "Grand Seminary" at Quebec, by Laval.
1664. May, Company of the West Indies founded.
1665. Mar. 23, Talon appointed Intendant.
1666. Feb.-Mar., First census; population of New France, 3,215.
1667. July 21, Acadia restored to France by the Treaty of Breda. Sept.-Oct., Second census; white population of New France, 3,918.
1668. Foundation of the "Little Seminary" at Quebec by Laval. Mission at Sault Ste. Marie founded by Marquette.
1670. May 2, Charter of the Hudson's Bay Company granted.
1671. Population of Acadia, 392.
1672. Population of New France, 6,705. April 6, Comte de Frontenac, Governor.
1673. June 13, Cataraqui (Kingston) founded.
1674. Oct. 1, Laval became first Bishop of Quebec.
1675. Population of New France, 7,832.
1678. Niagara falls visited by Hennepin.
1679. Ship *Le Griffon* built on Niagara river above the falls by La Salle. Third census; population of New France, 9,400; of Acadia, 515.
1681. Fourth census; population of New France, 9,677.
1682. Frontenac recalled.
1683. White population of New France, 10,274; settled Indians, 1,512.
1685. First issue of card money. Fifth census; population of New France, 12,515, including 1,538 settled Indians.
1686. Population of New France, 12,566, including 1,436 settled Indians; of Acadia, 894.
1687. Mar. 18, La Salle assassinated.
1688. Sixth census; population of New France, 11,782, including 1,259 settled Indians.
1689. June 7, Frontenac reappointed Governor. Aug. 5, Massacre of whites by Indians at Lachine.
1690. May 21, Sir William Phips captured Port Royal, but was repulsed in an attack on Quebec (Oct. 16-21).
1692. Seventh census; population of New France, 12,431. Oct. 22, Defence of Verchères against Indians by Madeleine de Verchères.
1693. Population of Acadia, 1,018.
1695. Eighth census; population of New France, 13,639, including 853 settled Indians.
1697. Sept. 20, By the treaty of Ryswick, places taken during the war were mutually restored. D'Iberville defeated the Hudson's Bay Co.'s ships on Hudson bay.
1698. Nov. 28, Death of Frontenac. Ninth census; population of New France, 15,361.
1701. La Motte Cadillac built a fort at Detroit.
1703. June 16, Sovereign Council of Canada became Superior Council and membership increased from 7 to 12.
1706. Tenth census; population of New France, 16,745.
1708. Death of Laval.
1709. British invasion of Canada.
1710. Oct. 13, Port Royal taken by Nicholson.
1711. Sept. 1, Part of Sir H. Walker's fleet, proceeding against Quebec, wrecked off the Seven Islands.
1713. April 11, Treaty of Utrecht; Hudson Bay, Acadia, and Newfoundland ceded to Great Britain. August, Louisbourg founded by the French. Population of New France, 18,469.
1718. Foundation of New Orleans in carrying out French plan to control the Mississippi as well as the St. Lawrence.
1719. Census population of New France, 22,503.
1720. Population of New France, 24,594; of Ile St. Jean (P.E.I.), about 100. April 25, Governor and Council of Nova Scotia appointed.
1721. June 19, Burning of about one-half of Montreal. Census population of New France, 25,923.
1727. Population of New France, 31,184.
1728. Population of Ile St. Jean (P.E.I.), 336.
1731. Population of the north of the peninsula of Acadia, 6,000.
1733. Discovery of lake Winnipeg by La Vérendrye.
1734. Road opened from Quebec to Montreal. Census population of New France, 37,716.

1737. Iron smelted on St. Maurice. French population of the north of the Acadia peninsula, 6,958.

1739. Census population of New France, 43,362.

1743. The younger La Vérendrye discovered the Rocky mountains.

1745. June 17, Taking of Louisbourg by Pepperell and Warren.

1748. Oct. 18, Treaty of Aix-la-Chapelle. Louisbourg restored to France in exchange for Madras.

1749. June 21, Founding of Halifax—British immigrants brought to Nova Scotia by Governor Cornwallis, 2,544 persons. Fort Rouillé (Toronto) built.

1750. St. Paul's Church, Halifax (oldest Anglican church in Canada), built.

1752. Mar. 25, Issue of the Halifax *Gazette*, first newspaper in Canada, British and German population of Nova Scotia, 4,203.

1754. Census population of New France, 55,009.

1755. Establishment at Halifax of first post office in what is now Canada, together with direct mail communication with Great Britain. June 16, Surrender of Fort Beauséjour on the isthmus of Chignecto to the British. Sept. 10, Expulsion of the Acadians from Nova Scotia.

1756. Seven Years' War between Great Britain and France began.

1758. July 26, Final capture of Louisbourg by the British. Oct. 7, First meeting of the Legislature of Nova Scotia.

1759. July 25, Taking of Fort Niagara by the British. July 26, Beginning of the siege of Quebec. July 31, French victory at Beauport Flats. Sept. 13, Defeat of the French on the Plains of Abraham. Death of Wolfe. Sept. 14, Death of Montcalm. Sept. 18, Surrender of Quebec.

1760. April 28, Victory of the French under Lévis at Ste. Foy. Sept. 8, Surrender of Montreal. Military rule set up in Canada.

1762. British population of Nova Scotia, 8,104. First British settlement in New Brunswick.

1763. Feb. 10, Treaty of Paris, by which Canada and its dependencies were ceded to the British. May, Rising of Indians under Pontiac, who took a number of forts and defeated the British at Bloody Run (July 31). Oct. 7, Civil government proclaimed. Cape Breton and Ile St. Jean annexed to Nova Scotia; Labrador, Anticosti, and Magdalen islands to Newfoundland. Nov. 21, General James Murray appointed Governor-in-Chief. Canadian post offices established at Montreal, Three Rivers, and Quebec.

1764. June 21, First issue of the Quebec *Gazette*. Aug. 13, Civil government established.

1765. Publication of the first book printed in Canada, "Catéchisme du Diocèse de Sens". May 18, Montreal nearly destroyed by fire. Population of Canada, 69,810.

1766. July 24, Peace made with Pontiac at Oswego.

1768. Charlottetown, Ile St. Jean (P.E.I.), founded. April 11, Great fire at Montreal. April 12, Sir Guy Carleton (Lord Dorchester) Governor-in-Chief.

1769. Ile St. Jean (P.E.I.) separated from Nova Scotia.

1770–72. Hearne's journey to the Coppermine and Slave rivers and Great Slave lake.

1773. Suppression of the order of Jesuits in Canada and escheat of their estates.

1774. June 22, The Quebec Act passed.

1775. May 1, The Quebec Act came into force. Outbreak of the American Revolution. Montgomery and Arnold invaded Canada, Nov. 12, Montgomery took Montreal; Dec. 31, was defeated and killed in an attack on Quebec.

1776. The Americans were defeated and driven from Canada by Carleton.

1777. Sept. 18, General Frederick Haldimand Governor-in-Chief.

1778. Captain Jas. Cook explored Nootka sound and claimed the northwest coast of America for Great Britain. June 3, First issue of the Montreal *Gazette*.

1783. Sept. 3, Treaty of Versailles, recognizing the independence of the United States. Organization of the Northwest Company at Montreal. Kingston, Ont., and Saint John, N.B., founded by the United Empire Loyalists.

1784. Population of Lower Canada, 113,012. Aug. 16, New Brunswick and (Aug. 26) Cape Breton separated from Nova Scotia.

1785. May 18, Incorporation of Parrtown (Saint John, N.B.).

1786. April 22, Lord Dorchester again Governor in-Chief. Oct. 23, Government of New Brunswick moved from Saint John to Fredericton.

1787. C. Inglis appointed Anglican Bishop of Nova Scotia—the first colonial bishopric in the British Empire.

1788. King's College, Windsor, N.S., opened. Sailing packet service restored between Great Britain and Halifax.

1789. Quebec and Halifax Agricultural Societies established.

1790. Spain surrendered her exclusive rights on the Pacific coast. Population of Canada, 161,311. (This census did not include what became, in the next year, Upper Canada.)

1791. The Constitutional Act divided the province of Quebec into Upper and Lower Canada, each with a lieutenant-governor and legislature. The Act went into force Dec. 26. Sept. 12, Colonel J. G. Simcoe, first Lieutenant-Governor of Upper Canada.

1792. Sept. 17, First Legislature of Upper Canada opened at Newark (Niagara). Dec. 17, First Legislature of Lower Canada opened at Quebec. Vancouver island circumnavigated by Vancouver.

1793. April 18, First issue of the *Upper Canada Gazette*. June 28, Jacob Mountain appointed first Anglican Bishop of Quebec. July 9, Importation of slaves into Upper Canada forbidden. Rocky mountains crossed by (Sir) Alexander Mackenzie, who reached the Pacific ocean. York (Toronto) founded by Simcoe.

1794. Nov. 19, Jay's Treaty between Great Britain and the United States.

1795. Pacific coast of Canada finally given up by Spaniards.

1796. Government of Upper Canada moved from Niagara to York (Toronto).

1798. St. John's island (Ile St. Jean, population 4,372) renamed Prince Edward Island.

1800. Founding of New Brunswick College, Fredericton (now University of N.B.). The Rocky mountains crossed by David Thompson.

1803. Settlers sent by Lord Selkirk to Prince Edward Island.

1806. Nov. 22, Issue of *Le Canadien*—first wholly French newspaper. Population—Upper Canada, 70,718; Lower Canada, 250,000; New Brunswick, 35,000; P.E.I., 9,676; Nova Scotia, 65,000; Cape Breton, 2,513.

1807. Simon Fraser explored the Fraser river.

1809. Nov. 4, First Canadian steamer ran from Montreal to Quebec.

1811. Lord Selkirk's Red River settlement founded on land granted by Hudson's Bay Company.

1812. June 18, Declaration of war by the United States. July 12, Americans under Hull crossed the Detroit river. Aug. 16, Detroit surrendered by Hull to Brock. Oct. 13, Defeat of the Americans at Queenston Heights and death of General Brock.

1813. Jan. 22, British victory at Frenchtown. April 27, York (Toronto) taken and burned by the Americans. June 5, British victory at Stoney Creek. June 24, British, warned by Laura Secord, captured an American force at Beaver Dams. Sept. 10, Commodore Perry destroyed the British flotilla on lake Erie. Oct. 5, Americans under Harrison defeated the British at Moraviantown, Tecumseh killed. Oct. 26, Victory of French-Canadian troops under de Salaberry at Châteauguay. Nov. 11, Defeat of the Americans at Crysler's Farm. British stormed Fort Niagara and burned Buffalo.

1814. Mar. 30, Americans repulsed at La Colle. May 6, Capture of Oswego by the British. July 5, American victory at Chippawa. July 25, British victory at Lundy's Lane. July, British from Nova Scotia invaded and occupied northern Maine. Sept. 11, British defeat at Plattsburg on lake Champlain. Dec. 24, Treaty of Ghent ended the war. Population—Upper Canada, 95,000; Lower Canada, 335,000.

1815. July 3, Treaty of London regulated trade with the United States. The Red River settlement destroyed by the Northwest Company but restored by Governor Semple.

1816. June 19, Governor Semple killed. The Red River settlement again destroyed.

1817. July 18, First Treaty with the Northwest Indians. Lord Selkirk restored the Red River settlement. Opening of the Bank of Montreal; first note issue Oct. 1. Population of Nova Scotia, 81,351. Rush-Bagot Convention with the United States, limiting naval armament on the Great Lakes, signed.

1818. Oct. 20, Convention at London regulating North American fisheries. Dalhousie College, Halifax, founded. Bank of Quebec founded.

1819–22. Franklin's overland Arctic expedition.

1820. Oct. 16, Cape Breton re-annexed to Nova Scotia.

1821. Mar. 26. The Northwest Company absorbed by the Hudson's Bay Company. Charter given to McGill College.

1822. Population of Lower Canada, 427,465.

1824. Population of Upper Canada, 150,066; of New Brunswick, 74,176.

1825. Oct. 6, Great fire in the Miramichi district, N.B. Opening of the Lachine canal. Population of Lower Canada, 479,288.

1826. Founding of Bytown (Ottawa).

1827. Sept. 29, Convention of London relating to the territory west of the Rocky mountains. Population of Nova Scotia (not including the county of Cape Breton), 123,630.

1828. The Methodist Church of Upper Canada separated from that of the United States.

1829. Nov. 27, First Welland canal opened. McGill University opened. Upper Canada College founded.

1831. June 1, The North Magnetic Pole discovered by (Sir) James Ross. Population—Upper Canada, 236,702; Lower Canada, 553,134; Assiniboia, 2,390.

1832. Outbreak of cholera in Canada. Incorporation of Quebec and Montreal.

Bank of Nova Scotia founded. May 30, Opening of the Rideau canal.

1833. Aug. 18, The steamer *Royal William*, built at Quebec, crossed the Atlantic from Pictou to England.

1834. Feb. 21, The Ninety-Two Resolutions on public grievances passed by the Assembly of Lower Canada. Mar. 6, Incorporation of Toronto. Population of Upper Canada, 321,145; of New Brunswick, 119,457; of Assiniboia, 3,356.

1836. July 21, Opening of the first railway in Canada from Laprairie to St. Johns, Que. Victoria University opened at Cobourg (afterwards moved to Toronto).

1837. Report of the Canada Commissioners. Rebellion in Lower Canada (Papineau) and Upper Canada (W. L. Mackenzie). Nov. 23, Gas lighting first used in Montreal.

1838. Feb. 10, Constitution of Lower Canada suspended and Special Council created. Mar. 30, The Earl of Durham, Governor-in-Chief. April 27, Martial law revoked. June 28, Amnesty to political prisoners proclaimed. Nov. 1, Lord Durham, censured by British Parliament, resigned. Population—Upper Canada 339,442; Assiniboia, 3,966; Nova Scotia, 202,575.

1839. Feb. 11, Lord Durham's report submitted to Parliament. John Strachan ordained first Anglican Bishop of Toronto. Oct. 19, Charles Poulett Thomson (Lord Sydenham) arrived in Canada as Governor-in-Chief.

1840. July 23, Passing of the Act of Union. First ship of the Cunard line arrived at Halifax.

1841. Feb. 10, Union of the two provinces as the Province of Canada, with Kingston as capital. Feb. 13, Draper-Ogden Administration. April 10, Halifax incorporated. June 13, Meeting of the first United Parliament. Sept. 19, Death of Lord Sydenham. Population of Upper Canada, 455,668; of P.E.I., 47,042.

1842. Mar. 10, Opening of Queen's University, Kingston. Aug. 9, The Ashburton Treaty. Sept. 16, Baldwin-Lafontaine Administration.

1843. June 4, Victoria, B.C., founded. Dec. 12, Draper-Viger Administration. King's (now University) College, Toronto, opened.

1844. May 10, Capital moved from Kingston to Montreal. Knox College, Toronto, founded. Population of Lower Canada, 697,084.

1845. May 28 and June 28, Great fires at Quebec. Franklin started on his last Arctic expedition.

1846. May 18, Kingston incorporated. June 15, Oregon Boundary Treaty. June 18, Draper-Papineau Administration. First telegraph, operated by Toronto, Hamilton and Niagara Electro-Magnetic Telegraph Co., opened.

1847. May 29, Sherwood-Papineau Administration. Nov. 25, Montreal-Lachine Railway opened.

1848. Mar. 11, Lafontaine-Baldwin Administration. May 30, Fredericton incorporated. St. Lawrence canals opened to navigation.

1849. April 25, Signing of the Rebellion Losses Act; rioting in Montreal and burning of the Parliament Buildings. Nov. 14, Toronto made the capital. Vancouver island granted to the Hudson's Bay Company. Population of Assiniboia, 5,391.

1851. April 6, Transfer of the postal system from the British to the Provincial Government; uniform rate of postage introduced. April 23, Postage stamps issued. Aug. 2, Incorporation of Trinity College, Toronto. Sept. 22, Quebec became the capital. Oct. 28, Hincks-Morin Administration. Responsible government granted to Prince Edward Island. Population—Upper Canada, 952,004; Lower Canada, 890,261; New Brunswick, 193,800; Nova Scotia, 276,854.

1852. July 8, Great fire at Montreal. Dec. 8, Laval University, Quebec, opened. Grand Trunk Railway chartered.

1853. Opening of Grand Trunk Railway from Montreal to Portland.

1854. June 5, Reciprocity Treaty with the United States. Sept. 11, MacNab-Morin Ministry. Seigneurial tenure in Lower Canada abolished. Secularization of the clergy reserves.

1855. Jan. 1, Incorporation of Ottawa. Jan. 27, MacNab-Taché Administration. Mar. 9, Opening of the Niagara Railway suspension bridge. April 17, Incorporation of Charlottetown. Oct. 20, Government moved to Toronto.

1856. The Legislative Council of Canada made elective. First meeting of the Legislature of Vancouver island. May 24, Taché-J. A. Macdonald Administration. Oct. 27, Opening of the Grand Trunk Railway from Montreal to Toronto. Population of Assiniboia, 6,691.

1857. Nov. 26, J. A. Macdonald-Cartier Administration. Dec. 31, Ottawa chosen by Queen Victoria as future capital of Canada.

1858. February, Discovery of gold in Fraser River valley. July 1, Introduction of Canadian decimal currency. Aug. 2, Brown-Dorion Administration. Aug. 5, Completion of the Atlantic cable; first message sent. Aug. 6, Cartier-J. A. Macdonald Administration. Aug. 20, Colony of British Columbia established. Control of Vancouver island surrendered by the Hudson's Bay Company.

1859. January, Canadian silver coinage issued. Sept. 24, Government moved to Quebec.

1860. Aug. 8, The Prince of Wales (King Edward VII) arrived at Quebec. Sept. 1, Laying of the corner-stone of the Parliament Buildings at Ottawa by the Prince of Wales. Prince of Wales College, Charlottetown, founded.

1861. Aug. 14, Great flood at Montreal. Sept. 10, Meeting of the first Anglican provincial synod. Population—Upper Canada, 1,396,091; Lower Canada, 1,111,566; New Brunswick, 252,047; Nova Scotia, 330,857; Prince Edward Island, 80,857.

1862. May 24, Sandfield Macdonald-Sicotte Administration. Aug. 2, Victoria, B.C., incorporated.

1863. May 16, Sandfield Macdonald-Dorion Administration.

1864. Mar. 30, Taché-J. A. Macdonald Administration. Conferences on confederation of British North America; Sept. 1, at Charlottetown; Oct. 10-29, at Quebec. Oct. 19, Raid of American Confederates from Canada on St. Albans, Vermont.

1865. Feb. 3, The Canadian Legislature resolved on an address to the Queen praying for union of the provinces of British North America. Aug. 7, Belleau-J. A. Macdonald Administration. Oct. 20, Proclamation fixing the seat of government at Ottawa.

1866. Mar. 17, Termination of the Reciprocity Treaty by the United States. May 31, Raid of Fenians from the United States into Canada; they were defeated at Ridgeway (June 2) and retreated across the border (June 3). June 8, First meeting at Ottawa of the Canadian Legislature. Nov. 17, Proclamation of the union of Vancouver Island with British Columbia.

NOTE.—*The Ministries and the dates of elections and lengths of sessions of all Dominion Parliaments following Confederation are given in Tables 2 and 4, respectively, of Chapter III. Changes in Provincial Legislatures and Ministries from Confederation to 1923 are given at pp. 75-84 of the 1924 Year Book, and from 1924 to 1937 at pp. 110-118 of the 1938 Year Book. Changes since 1937 are included in the Chronology. References regarding these matters have therefore been dropped from the chronology below.*

1867. Mar. 29, Royal Assent given to the British North America Act. July 1, The Act came into force; Union of the provinces of Canada, Nova Scotia and New Brunswick as the Dominion of Canada; Upper and Lower Canada made separate provinces as Ontario and Quebec; Viscount Monck, first Governor General; Sir John A. Macdonald, Premier. Nov. 6, Meeting of the first Dominion Parliament.

1868. April 7, Murder of D'Arcy McGee at Ottawa. July 31, The Rupert's Land Act authorized the acquisition by the Dominion of the Northwest Territories.

1869. June 22, Act providing for the government of the Northwest Territories. Nov. 19, Deed of surrender to the Crown of the Hudson's Bay Company's territorial rights in the Northwest. Outbreak of the Red River Rebellion under Riel.

1870. May 12, Act to establish the province of Manitoba. July 15, Northwest Territories transferred to the Dominion and Manitoba admitted into Confederation. Aug. 24, Wolseley's expedition reached Fort Garry (Winnipeg); end of the rebellion.

1871. April 2, First Dominion Census (populations at this and succeeding enumerations given on p. 79. April 14, Act establishing uniform currency in the Dominion. May 8, Treaty of Washington, dealing with questions outstanding between the United Kingdom and the United States. July 20, British Columbia entered Confederation.

1873. May 23, Act establishing the North West Mounted Police. July 1, Prince Edward Island entered Confederation. Nov. 8, Incorporation of Winnipeg.

1874. May, Ontario Agricultural College, Guelph, opened.

1875. April 8, The Northwest Territories Act established a Lieutenant-Governor and a Northwest Territories Council. April–May, Letting of first contract and commencement of work upon the Canadian Pacific railway as a Government line; work commenced at Fort William. June 15, Formation of the Presbyterian Church in Canada.

1876. June 1, Opening of the Royal Military College, Kingston. June 5, First sitting of the Supreme Court of Canada. July 3, Opening of the Intercolonial Railway from Quebec to Halifax. Branch of Laval University established at Montreal.

1877. June 20, Great fire at Saint John, N.B. October, First exportation of wheat from Manitoba to the United Kingdom. Founding of the University of Manitoba.

1878. July 1, Canada joined the International Postal Union.

1879. May 15, Adoption of a protective tariff ("The National Policy").

1880. Royal Canadian Academy of Arts founded; first meeting and exhibition, Mar. 6. May 11, Sir A. T. Galt appointed first Canadian High Commissioner in London. Sept. 1, All British possessions in North America and adjacent islands except Newfoundland and its dependencies annexed to Canada by Imperial Order in Council of July 31. Oct. 21, Signing of the contract with the present Canadian Pacific Railway Co. for the completion of the Canadian Pacific railway.

1881. April 4, Second Dominion Census. May 2, First sod of the Canadian Pacific railway as a company line turned.

1882. May 8, Provisional districts of Assiniboia, Saskatchewan, Athabaska, and Alberta formed. May 25, First meeting of the Royal Society of Canada. Aug. 23, Regina established as seat of government of the Northwest Territories.

1883. Sept. 5, Formation of the Methodist Church in Canada; united conference.

1884. May 24, Sir Charles Tupper, High Commissioner in London. Aug. 11, Order in Council settling the boundary of Ontario and Manitoba.

1885. Mar. 26, Outbreak of Riel's second rebellion in the Northwest. April 24, Engagement at Fish Creek. May 2, Engagement at Cut Knife. May 12, Taking of Batoche. May 16, Surrender of Riel. Aug. 24, First census of the Northwest Territories. Nov. 7, Last spike of Canadian Pacific Railway main line driven at Craigellachie. Nov. 16, Execution of Riel.

1886. April 6, Incorporation of Vancouver. June 7, Archbishop Taschereau of Quebec made first Canadian Cardinal. June 13, Vancouver destroyed by fire. June 28, First through train of the Canadian Pacific Railway left Montreal for Port Moody. July 31, First quinquennial census of Manitoba.

1887. Interprovincial Conference at Quebec. April 4, First Colonial Conference in London.

1888. Feb. 15, Signing of Fishery Treaty between United Kingdom and United States at Washington. August, Rejection of Fishery Treaty by United States Senate.

1890. Mar. 31, The Manitoba School Act abolished separate schools.

1891. April 5, Third Dominion Census. June 6, Death of Sir John A. Macdonald.

1892. Feb. 29, Washington Treaty, providing for arbitration of the Bering Sea Seal Fisheries question. July 22, Boundary Convention between Canada and United States.

1893. April 4, First sitting of the Bering Sea Arbitration Court. Dec. 18, Archbishop Machray, of Rupert's Land, elected first Anglican Primate of all Canada.

1894. June 28, Second Colonial Conference at Ottawa. Dec. 12, Death of Sir John Thompson at Windsor Castle.

1895. Sept. 10, Opening of new Sault Ste. Marie canal.

1896. April 24, Sir Donald Smith (Lord Strathcona) High Commissioner in London. August, Gold discovered in the Klondyke.

1897. June 22, Celebration throughout the Empire of the Diamond Jubilee of H.M. Queen Victoria. July, Third Colonial Conference in London. Dec. 17, Award of the Bering Sea Arbitration Court.

1898. June 13, The Yukon district established as a separate Territory. Aug. 1, The British Preferential Tariff went into force. Aug. 23, Meeting at Quebec of the Joint High Commission between Canada and the United States. Dec. 25, British Imperial penny (2 cent) postage introduced.

1899. Oct. 1, Mgr. Diomède Falconio arrived at Quebec as first permanent Apostolic Delegate to Canada. Oct. 11, Beginning of the South African War. Oct. 29, First Canadian contingent left Quebec for South Africa.

1900. Feb. 27, Battle of Paardeberg. April 26, Great fire at Ottawa and Hull.

1901. Jan 22, Death of Queen Victoria and accession of King Edward VII. April 1, Fourth Dominion Census. Sept. 16–Oct. 21, Visit to Canada of the Duke and Duchess of Cornwall and York (King George V and Queen Mary).

1902. May 31, End of South African War; peace signed at Vereeniging. June 30, Meeting of fourth Colonial Conference in London. Aug. 9, Corona-of H. M. King Edward VII. Dec., First message sent by wireless from Canada to the United Kingdom *via* Cape Breton, N.S.

1903. Jan. 24, Signing of the Alaskan Boundary Convention. June 19, Incorporation of Regina. Oct. 20, Award of the Alaskan Boundary Commission.

1904. Feb. 1, Dominion Railway Commission established. April 19, Great fire in Toronto. Oct. 8, Incorporation of Edmonton.

1905. Sept. 1, Creation of the provinces of Alberta and Saskatchewan.

NOTE.—For references regarding Dominion Government changes, and Provincial Government changes prior to 1937, see Note on p. 45.

1906. Roald Amundsen, in the schooner *Gjoa*, arrived at Nome, Alaska, on completion of the first traverse of the North-West Passage. University of Alberta founded. Oct. 8, Interprovincial Conference at Ottawa.

1907. April 15–May 14, Fifth Colonial Conference in London. New customs tariff, including introduction of intermediate tariff. Oct. 17, Transatlantic wireless open for limited public service. University of Saskatchewan founded. Dec. 6, First recorded flight in Canada of a heavier-than-air machine carrying a passenger (Dr. Graham Bell's tetrahedral kite, *Cygnet*).

1908. Jan. 2, Establishment of Ottawa Branch of Royal Mint. June 21-23, Bicentenary of Bishop Laval celebrated at Quebec. July 20-31, Quebec tercentenary celebrations. Visit of Prince of Wales to Quebec. Aug. 2, Great fire in Kootenay valley, B.C. University of British Columbia founded.

1909. Jan. 11, Signing of International Boundary Waters Convention between Canada and United States. Feb. 23, First flight in Canada of a heavier-than-air machine under its own power (McCurdy's *Silver Dart*).

1910. May 6, Death of King Edward VII and accession of King George V. Sept. 7, North Atlantic Coast Fisheries Arbitration Award of The Hague Tribunal. New trade agreements made with Germany, Belgium, Holland, and Italy. Oct. 11, Inauguration at Kitchener of Ontario hydro-electric power transmission system.

1911. May 23–June 20, Imperial Conference in London. June 1, Fifth Dominion Census. June 22, Coronation of H.M. King George V. July 11, Disastrous fires in Porcupine district.

1912. Mar. 29–April 9, First Canada-West Indies Trade Conference held at Ottawa. April 15, Loss of the steamship *Titanic*. Appointment of Dominions Royal Commission. May 15, Extension of the boundaries of Quebec, Ontario, and Manitoba.

1914. May 20, Loss of the steamship *Empress of Ireland*. Aug. 4, War with Germany; Aug. 12, with Austria-Hungary; Nov. 5, with Turkey. Aug. 18–22, Special war session of Canadian Parliament. Oct. 16, First Canadian contingent of over 33,000 troops landed at Plymouth, England.

1915. February, First Canadian contingent landed in France and proceeded to Flanders. April 22, Second Battle of Ypres. April 24, Battle of St. Julien. May 20–26, Battle of Festubert. June 15, Battle of Givenchy.

1916. Jan. 12, Order in Council authorizing increase in number of Canadian troops to 500,000. Feb. 3, Destruction of the Houses of Parliament at Ottawa by fire. April 3–20, Battle of St. Eloi. June 1, Census of Prairie Provinces. June 1–3, Battle of Sanctuary Wood. July 1, Commencement of the Battle of the Somme. Sept. 1, Corner-stone of new Houses of Parliament laid by Duke of Connaught.

1917. Feb. 12–May 15, Imperial Conference. Mar. 20–May 2, Meetings in London of Imperial War Cabinet. Mar. 21–April 27, Imperial War Conference. April 6, United States declared war against Germany. April 9, Capture of Vimy Ridge. June 21, Appointment of Food Controller. Aug. 15, Battle of Loos, capture of Hill 70. Aug. 29, Passing of Military Service Act. Sept. 20, Completion of Quebec Bridge. Parliamentary franchise extended to women. Oct. 26–Nov. 10, Battle of Passchendaele. Dec. 6, Serious explosion at Halifax, N.S.

1918. Mar. 31, Germans launched critical offensive on West Front. March–April, Second Battle of the Somme. April 17, Secret session of Parliament. June–July, Prime Minister and colleagues attended Imperial War Conference in London. July 18, Allies assumed successful offensive on West Front. Aug. 12, Battle of Amiens. Aug. 26–28, Capture of Monchy le Preux. Sept. 2–4, Breaking of Drocourt-Quéant line. Sept. 16, Austrian peace note. Sept. 27–29, Capture of Bourlon Wood. Sept. 30, Bulgaria surrendered and signed armistice. Oct. 1–9, Capture of Cambrai. Oct. 6, First German peace note. Oct. 20, Capture of Denain. Oct. 25–Nov. 2, Capture of Valenciennes. Oct. 31, Turkey surrendered and signed armistice. Nov. 4, Austria-Hungary surrendered and signed armistice. Nov. 11, Capture of Mons. Germany surrendered and signed armistice.

1919. Feb. 17, Death of Sir Wilfrid Laurier. May 1–June 15, General strike at Winnipeg and other western cities. June 28, Signing at Versailles of Peace Treaty and Protocol. Aug. 15, Arrival of the Prince of Wales for official tour in Canada. Aug. 22, Formal opening of Quebec Bridge by the Prince of Wales. Sept. 1, The Prince of Wales laid foundation stone of Peace Tower, Parliament Buildings, Ottawa. Sept. 1–Nov. 10, Special peace session, thirteenth

---

NOTE.—For references regarding Dominion Government changes, and Provincial Government changes prior to 1937, see Note on p. 45.

Parliament of Canada. Dec. 20, Organization of "Canadian National Railways" by Order in Council.

1920. Jan. 10, Ratifications of the Treaty of Versailles. Feb. 19, Shareholders ratified agreement for sale of the Grand Trunk Railway to the Dominion Government. May 31–June 18, Trade Conference at Ottawa between Dominion and West Indian Governments. July 10, Sir Robert Borden succeeded by Rt. Hon. Arthur Meighen as Prime Minister. July 16, Ratifications of the Treaty of St. Germain-en-Laye. Aug. 9, Ratifications of the Treaty of Neuilly-sur-Seine. Nov. 15, First meeting of League of Nations Assembly began at Geneva, Switzerland.

1921. May 10, Preferential tariff arrangement with British West Indies became effective. June 1, Sixth Dominion Census. June 20–Aug. 5, Imperial Conference. Nov. 11, Opening of Conference on limitation of armament at Washington.

1922. Feb. 1, Arms Conference at Washington approved 5-power treaty, limiting capital fighting ships and disapproving unrestricted submarine warfare and use of poison gas. April 10, General Economic Conference opened at Genoa. July 13, Conference between Canada and the United States *re* perpetuating the Rush-Bagot Treaty regarding armament on the Great Lakes. Aug. 7, Allies' Conference on war debts and reparations opened at London. Oct. 10, Mudania Armistice signed by Britain, France, and Turkey. Dec. 9, Reparations Conference opened at London.

1923. April 1, Removal of British embargo on Canadian cattle effective. Oct. 1, Imperial Conference and Economic Conference at London.

1924. April 23, British Empire Exhibition opened by King George at Wembley, England, with the Prince of Wales as President. Aug. 6–16, Meeting of the British Association for the Advancement of Science at Toronto. Aug. 11–16, Meeting of International Mathematical Congress at Toronto.

1925. June 10, Inauguration of the United Church of Canada. Nov. 20, Death of Queen Alexandra.

1926. June 1, Census of Prairie Provinces. July 1, Two-cent domestic rate of postage restored. Oct. 19–Nov. 23, Imperial Conference in London. Nov. 26, Hon. C. Vincent Massey appointed Envoy Extraordinary and Minister Plenipotentiary to the United States.

1927. June 1, Hon. Wm. Phillips, first U.S. Minister to Canada, reached Ottawa. July 1–3, Diamond Jubilee of Confederation celebrated throughout the Dominion. July 30, The Prince of Wales, Prince George, the Rt. Hon. Stanley Baldwin and party, arrived at Quebec on a visit to Canada. September, Canada elected as a non-permanent member of the Council of the League of Nations at Geneva. November, Dominion-Provincial Conference on the relations between the Dominion and the provinces.

1928. April 25, Sir Wm. H. Clark appointed first British High Commissioner to Canada. May 31, Legislative Council of Nova Scotia ceased to exist, leaving Quebec the only province with a bi-cameral legislature.

1929. Oct. 15–25, The Rt. Hon. J. Ramsay MacDonald, Prime Minister of Great Britain, visited Canada. Dec. 14, Transfer of natural resources to Manitoba and Alberta.

1930. Jan. 21, Five-power naval arms conference opened at London; Canada represented by Hon. J. L. Ralston. Feb. 20, Transfer of natural resources to British Columbia. Mar. 20, Transfer of natural resources to Saskatchewan. Aug. 1, H.M. Airship R-100 arrived at Montreal, being the first transatlantic ligher-than-air craft to reach Canada. Oct. 1, Imperial Conference in London.

1931. June 1, Seventh Dominion Census. June 30, The Statute of Westminster exempting the Dominion and the provinces from the operation of the Colonial Laws Validity Act and the Merchant Shipping Act approved by the House of Commons. Sept. 21, Great Britain suspended specie payments, following which Canada restricted the export of gold. Nov. 21, Abnormal Importations Act, extending preference to Empire products, assented to in the United Kingdom. Dec. 12, Statute of Westminster establishing complete legislative equality of the Parliament of Canada with that of the United Kingdom became effective.

1932. July 21–Aug. 20, Imperial Economic Conference at Ottawa. Aug. 6, Official opening of the Welland Ship Canal.

1933. Jan. 17–19, Dominion-Provincial Conference. May 18, Celebration of the 150th anniversary of the landing of the Loyalists at Saint John.

1934. August, Celebration at Gaspe of the 400th anniversary of the first landing of Jacques Cartier.

NOTE.—For references regarding Dominion Government changes, and Provincial Government changes prior to 1937, see Note on p. 45.

1935. Mar. 11, Bank of Canada commenced business. May 6, Celebrations throughout the Empire of the 25th anniversary of the accession of King George V to the Throne. Sept. 15, Conference of British Commonwealth Statisticians met in Ottawa. Dec. 9, Dominion-Provincial Conference met in Ottawa; Naval Limitation Conference met in London.

1936. Jan. 20, Death of H.M. King George V and accession of H.M. King Edward VIII. Mar. 8, German forces reoccupied the Rhineland in defiance of the Treaty of Versailles. June 1, Quinquennial Census of the Prairie Provinces taken. July 1–Sept. 7, Celebration in Vancouver of the Golden Jubilee of that city and of the C.P.R. July 26, Unveiling of Vimy Memorial in France by H.M. King Edward VIII. Dec. 11, Abdication of H.M. King Edward VIII and accession of H.M. King George VI.

1937. Jan. 1, Belgium represented in Canada by a Minister Plenipotentiary. Mar. 30, The Governor General and Lady Tweedsmuir visited the White House at Washington to return the official visit made by President Roosevelt at Quebec on July 30, 1936. May 12, Coronation of H.M. King George VI. July 8, Imperial Airways flying boat *Caledonia* arrived at Montreal from Southampton, inaugurating the experimental phase of the Transatlantic Airways. Aug. 17, Dominion Government disallowed threeAlberta statutes on the ground of invasion of the legislative field assigned to the Dominion Parliament. Nov. 29, Rowell Commission on Constitutional Relations opened sittings at Winnipeg.

1938. Mar. 4, Unanimous judgments of the Supreme Court of Canada on the Alberta constitutional references made in favour of the Dominion Government regarding each of the questions submitted: powers of the Governor General in Council to disallow provincial legislation, and powers of the Lieutenant-Governor to reserve provincial legislation for the signification of the pleasure of the Governor General, were found to be valid and unrestricted; the press, credit regulation, and banking taxation measures were found unconstitutional. The Court also held the Social Credit Act unconstitutional, although this was not a subject of specific reference. June 9, Provincial general election in Saskatchewan. Liberal government of Hon. W. J. Patterson returned to power. June 15, Disallowance of Alberta Home Owners' Security Act and Securities Tax Act. July 7, Privy Council declined to rule on Alberta Acts for control of the Press and regulation of credit. July 15, Privy Council dismissed Alberta's appeal from judgment of Supreme Court of Canada on legislation to tax chartered banks. Aug. 15, Bank of Canada became a wholly government-owned institution. Sept. 2, British High Commissioner announced conclusion of arrangement between British Government and Canadian companies for construction of aeroplanes in Canada. Sept. 12, Herr Hitler's speech at Nuremberg followed by clashes on the Czechoslovak border, developing into an international crisis. Convention between Canada and United States placed control of waters in Rainy Lake watershed under International Joint Commission. Sept. 15, Meeting of Mr. Chamberlain and Herr Hitler at Berchtesgaden. Sept. 19, Royal Commission of inquiry into circumstances surrounding the letting of a contract for the manufacture of Bren machine guns opened at Ottawa, with Mr. Justice H. H. Davis as Commissioner. Sept. 22-23, Meeting of Mr. Chamberlain and Herr Hitler at Godesberg. Sept. 28, Mobilization of British fleet. Intervention by Signor Mussolini, and agreement by Germany to conference of United Kingdom, France, Germany, and Italy. Sept. 30, Crisis terminated following four-power conference at Munich. Oct. 11, Serious forest fires in Fort Frances area. Oct. 17, Inauguration of express service on Trans-Canada Air Lines. Nov. 4, Written Judgment of Privy Council stating reasons for rejection of appeal in Alberta Bank Tax Act. Nov. 17, Trade Agreement between Canada and United States signed at Washington.

1939. Jan. 13, Report of the Royal Commission of Inquiry into the Bren gun contract tabled in the House of Commons. Mar. 1, Opening of Trans-Canada air-mail service. Mar. 27, Dominion Government disallowed Alberta Government's legislation concerning Limitation of Actions Act of 1935, designed to outlaw certain debts contracted prior to July 1, 1936. Mar. 31, The Prime Minister of the United Kingdom announced arrangements for a treaty guaranteeing armed support to Poland in defence of its independence.

Note.—For references regarding Dominion Government changes and Provincial Government changes prior to 1937, see Note on p. 45.

CHAPTER III.—CONSTITUTION AND GOVERNMENT.

The Government of the Dominion of Canada was established under the provisions of the British North America Act of 1867. This Statute of the Imperial Parliament, as from time to time amended, forms the written basis of the Constitution of Canada. Subsequent sections of this chapter describe in some detail the institutions and processes by which Canada is governed.

The several stages in the development of its status as a Dominion have been authoritatively described in the reports of successive Imperial Conferences including that held in London in 1926, which defined the group of self-governing communities consisting of Great Britain and the Dominions as "autonomous communities within the British Empire, equal in status, in no way subordinate one to another in any aspect of their domestic or foreign affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations". That Conference also recognized that as a consequence of this equality of status, the Governor General of a Dominion "is the representative of the Crown, holding in all essential respects the same position in relation to the administration of public affairs in the Dominion as is held by His Majesty the King in Great Britain", and that "it is the right of the Government of each Dominion to advise the Crown in all matters relating to its own affairs". Simultaneously, with this change in the constitutional relationship between the several parts of the British Commonwealth of Nations, there developed as a complementary aspect of nationhood the assumption by the several Dominions of further responsibilities and rights of sovereign States in their relations with other members of the community of nations. Membership in the League of Nations, the exercise of treaty-making powers, and the establishment of separate diplomatic representation in a number of foreign countries have characterized this phase in the growth of the Dominion of Canada. More explicit recognition of the implications of the principles of equality of status was accorded in the Statute of Westminster of 1931 which provided for the removal of the remaining limitations on the legislative autonomy of the Dominions.

PART I.—CONSTITUTION AND GENERAL GOVERNMENT.

Under the above heading a brief historical and descriptive account of the evolution of the general government of Canada was given on pp. 89-100 of the Canada Year Book, 1922-23.

PART II.—PROVINCIAL AND LOCAL GOVERNMENT.

Under the heading "Provincial and Local Government in Canada", a brief account of the government of each of the provinces of Canada and of its municipal institutions and judicial organization was published on pp. 101-115 of the 1922-23 edition of the Year Book. The 1938 edition of the Year Book included at pp. 92-93 an article entitled "The Government of Canada's Arctic Territory".

PART III.—LEGISLATIVE AND EXECUTIVE AUTHORITIES.

Section 1.—Dominion Parliament and Ministry.

The Dominion Parliament is composed of the King, represented by the Governor General, the Senate, and the House of Commons. The Governor General is appointed by the King on the advice of the Government of Canada. Members of the Senate are appointed for life by the Governor General in Council and members of the House of Commons are elected by the people. As a result of the working out of the democratic principle, the part played by the King's Representative and the Upper Chamber of Parliament in the country's legislation has been, in Canada as in the United Kingdom, a steadily decreasing one, the chief responsibilities involved in legislation being assumed by the House of Commons.

In Subsections 3 and 4, pp. 55-65, a brief résumé of the history of parliamentary representation will be found. Attention may be drawn to the growth in the number of members of both the Senate and the House of Commons since Confederation and to the greatly increased unit of representation in the Lower House.

Subsection 1.—The Governor General of Canada.

The Governor General is appointed by the King as his representative in Canada, usually for a term of five years, with a salary fixed at £10,000 sterling per annum, which is a charge against the consolidated revenue of the country. The Governor General is bound by the terms of his commission and can exercise only such authority as is expressly entrusted to him. He acts under the advice of his Ministry, which is responsible to Parliament, and, as the acting head of the Executive, summons, prorogues, and dissolves Parliament, and assents to or reserves bills. In the discharge of these and other executive duties, he acts entirely by and with the advice of his Ministry (the Governor General in Council). The royal prerogative of mercy in capital cases, formerly exercised on the Governor General's own judgment and responsibility, is now exercised pursuant to the advice of the Ministry. The practice whereby the Governor General served as the medium of communication between the Canadian and the British Governments has been given up; since July 1, 1927, direct communication between His Majesty's Government in Canada and His Majesty's Government in Great Britain has been instituted.

A list of the Governors General from the time of Confederation, with the dates of their appointment and assumption of office, is given in Table **1**.

1.—Governors General of Canada, 1867-1939.

Name.	Date of Appointment.	Date of Assumption of Office.
Viscount Monck, G.C.M.G.	June 1, 1867	July 1, 1867
Lord Lisgar, G.C.M.G.	Dec. 29, 1868	Feb. 2, 1869
The Earl of Dufferin, K.P., K.C.B., G.C.M.G.	May 22, 1872	June 25, 1872
The Marquis of Lorne, K.T., G.C.M.G.	Oct. 5, 1878	Nov. 25, 1878
The Marquis of Lansdowne, G.C.M.G.	Aug. 18, 1883	Oct. 23, 1883
Lord Stanley of Preston, G.C.B.	May 1, 1888	June 11, 1888
The Earl of Aberdeen, K.T., G.C.M.G.	May 22, 1893	Sept. 18, 1893
The Earl of Minto, G.C.M.G.	July 30, 1898	Nov. 12, 1898
Earl Grey, G.C.M.G.	Sept. 26, 1904	Dec. 10, 1904
Field Marshall H.R.H. the Duke of Connaught, K.G.	Mar. 21, 1911	Oct. 13, 1911
The Duke of Devonshire, K.G., G.C.M.G., G.C.V.O.	Aug. 19, 1916	Nov. 11, 1916
General the Lord Byng of Vimy, G.C.B., G.C.M.G., M.V.O.	Aug. 2, 1921	Aug. 11, 1921
Viscount Willingdon of Ratton, G.C.S.I., G.C.I.E., G.B.E.	Aug. 5, 1926	Oct. 2, 1926
The Earl of Bessborough, G.C.M.G.	Feb. 9, 1931	April 4, 1931
Lord Tweedsmuir of Elsfield, G.C.M.G., C.H.	Aug. 10, 1935	Nov. 2, 1935

Subsection 2.—The Ministry.

A system of government based upon the British, by which a Cabinet or Ministry (composed of members of the House of Commons or the Senate), responsible to Parliament, holds office while it enjoys the confidence of the people's representa-

LIBRARY OF THE UNIVERSITY
OF ALBERTA

tives, is found in Canada. The Cabinet is actually a committee of the King's Privy Council for Canada. Without enlarging upon the features of the system, it may be sufficient to note that the Cabinet is responsible to the House of Commons, and, following established precedent, resigns office when it becomes evident that it no longer holds the confidence of the people's representatives. Members of the Cabinet are chosen by the Prime Minister; each generally assumes charge of one of the various Departments of Government, although a Minister may hold more than one portfolio at the same time, or may be without portfolio.

The Prime Ministers since Confederation and the dates of their tenures of office, together with the members of the Sixteenth Ministry, are given in Table **2.** The complete list of the members of the King's Privy Council for Canada, as at Mar. 15, 1939, is added as Table **3.**

2.—Ministries since Confederation and Members of the Sixteenth Ministry.

Note.—A complete list of the members of Dominion Ministries from Confederation to 1913 appeared in the Year Book of 1912, pp. 422-429. A list of the members of Dominion Ministries from 1911 to 1921 appeared in the Year Book of 1920, pp. 651-653. A list of the members of the Twelfth and Thirteenth Ministries appeared on pp. 76-77 of the 1927-28 Year Book. Members of the Fourteenth Ministry are listed at p. 69 of the 1930 Year Book and members of the Fifteenth Ministry on p. 67 of the 1934-35 Year Book.

1. Rt. Hon. Sir John A. Macdonald, Prime Minister. From July 1, 1867, to Nov. 6, 1873.
2. Hon. Alexander Mackenzie, Prime Minister. From Nov. 7, 1873, to Oct. 16, 1878.
3. Rt. Hon. Sir John A. Macdonald, Prime Minister. From Oct. 17, 1878, to June 6, 1891.
4. Hon. Sir John J. C. Abbott, Prime Minister. From June 16, 1891, to Dec. 5, 1892.
5. Hon. Sir John S. D. Thompson, Prime Minister. From Dec. 5, 1892, to Dec. 12, 1894.
6. Hon. Sir Mackenzie Bowell, Prime Minister. From Dec. 21, 1894, to April 27, 1896.
7. Hon. Sir Charles Tupper, Prime Minister. From May 1, 1896, to July 8, 1896.
8. Rt. Hon. Sir Wilfrid Laurier, Prime Minister. From July 11, 1896, to Oct. 6, 1911.
9. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Conservative Administration.) From Oct. 10, 1911, to Oct. 12, 1917.
10. Rt. Hon. Sir Robert L. Borden, Prime Minister. (Unionist Administration.) From Oct. 12, 1917, to July 10, 1920.
11. Rt. Hon. Arthur Meighen, Prime Minister. (Unionist—"National Liberal and Conservative Party".) From July 10, 1920, to Dec. 29, 1921.
12. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Dec. 29, 1921, to June 28, 1926.
13. Rt. Hon. Arthur Meighen, Prime Minister. From June 29, 1926, to Sept. 25, 1926.
14. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Sept. 25, 1926, to Aug. 6, 1930.
15. Rt. Hon. Richard Bedford Bennett, Prime Minister. From Aug. 7, 1930, to Oct. 23, 1935.
16. Rt. Hon. William Lyon Mackenzie King, Prime Minister. From Oct. 23, 1935.

SIXTEENTH DOMINION MINISTRY.

(According to precedence of the Ministers as at the formation of the Cabinet.)

Office.	Occupant.	Date of Appointment.
Prime Minister, President of the Privy Council, Secretary of State for External Affairs	Right Hon. W. L. Mackenzie King, C.M.G.	Oct. 23, 1935
Member of the Administration and Minister without portfolio	Hon. Raoul Dandurand, K.C.	Oct. 23, 1935
Minister of Mines and Resources[1]	Hon. Thomas Alexander Crerar.	Oct. 23, 1935
Minister of Justice and Attorney General of Canada	Right Hon. Ernest Lapointe, K.C.	Oct. 23, 1935
Minister of Public Works	Hon. Pierre Joseph Arthur Cardin, K.C.	Oct. 23, 1935
Minister of Finance	Hon. Charles Avery Dunning	Oct. 23, 1935
Postmaster General	Hon. Norman Alexander McLarty	Jan. 23, 1939
Minister of Trade and Commerce	Hon. William Daum Euler	Oct. 23, 1935
Secretary of State of Canada	Hon. Fernand Rinfret	Oct. 23, 1935
Minister of National Defence	Hon. Ian Alistair Mackenzie	Oct. 23, 1935
Minister of Pensions and National Health	Hon. Charles Gavan Power, M.C., K.C.	Oct. 23, 1935
Minister of National Revenue	Hon. James Lorimer Ilsley, K.C.	Oct. 23, 1935
Minister of Fisheries	Hon. Joseph Enoil Michaud, K.C.	Oct. 23, 1935
Minister of Labour	Hon. Norman McLeod Rogers	Oct. 23, 1935
Minister of Transport[2]	Hon. Clarence Decatur Howe	Oct. 23, 1935
Minister of Agriculture	Hon. James Garfield Gardiner	Oct. 28, 1935
Minister without portfolio	Hon James Angus MacKinnon	Jan. 23, 1939

---

[1] The Departments of Mines, Interior, Immigration and Colonization, and Indian Affairs were organized into the new Department of Mines and Resources on Dec. 1, 1936.

[2] The Department of Railways and Canals and the Department of Marine, together with the Civil Aviation Branch of the Department of National Defence were organized into the new Department of Transport on Nov. 2, 1936.

3.—Members of the King's Privy Council for the Dominion of Canada, According to Seniority Therein,[1] as at Mar. 15, 1939.

NOTE.—In this list the prefix Rt. Hon. indicates membership in the British Privy Council. Besides those mentioned in this list, the Rt. Hon. Sir Lyman P. Duff, G.C.M.G., Chief Justice of the Supreme Court, is a Canadian member of the British Privy Council.

Name.	Date When Sworn In.
The Rt. Hon. Sir William Mulock	July 12, 1896
The Rt. Hon. Sir Charles Fitzpatrick[2]	Feb. 11, 1902
The Hon. Sir A. B. Aylesworth	Oct. 16, 1905
The Rt. Hon. George P. Graham	Aug. 30, 1907
The Hon. R. Dandurand[3]	Jan. 20, 1909
The Rt. Hon. W. L. Mackenzie King[4]	June 2, 1909
The Rt. Hon. Sir Thomas White	Oct. 10, 1911
The Hon. Wilfrid Bruno Nantel	Oct. 10, 1911
The Hon. Pierre Edouard Blondin	Oct. 20, 1914
The Rt. Hon. Arthur Meighen	Oct. 2, 1915
The Hon. Esioff Léon Patenaude	Oct. 6, 1915
The Rt. Hon. William Morris Hughes	Feb. 18, 1916
The Hon. Albert Sévigny	Jan. 8, 1917
The Hon. Charles Colquhoun Ballantyne	Oct. 3, 1917
The Hon. James Alexander Calder	Oct. 12, 1917
The Hon. Newton Wesley Rowell	Oct. 12, 1917
The Hon. Sydney Chilton Mewburn	Oct. 12, 1917
The Hon. Thomas Alexander Crerar[3]	Oct. 12, 1917
The Hon. Alexander K. Maclean	Oct. 23, 1917
The Hon. Hugh Guthrie	July 5, 1919
The Hon. Sir Henry Lumley Drayton	Aug. 2, 1919
The Hon. Fleming Blanchard McCurdy	July 13, 1920
The Hon. Rupert W. Wigmore	July 13, 1920
The Hon. Edgar N. Rhodes	Feb. 22, 1921
The Hon. John Babbington Macaulay Baxter	Sept. 21, 1921
The Hon. Henry Herbert Stevens	Sept. 21, 1921
The Hon. Robert James Manion[5]	Sept. 22, 1921
The Hon. James Robert Wilson	Sept. 26, 1921
The Rt. Hon. Richard Bedford Bennett	Oct. 4, 1921
The Rt. Hon. Ernest Lapointe[3]	Dec. 29, 1921
The Hon. Arthur Bliss Copp	Dec. 29, 1921
The Hon. Charles Stewart	Dec. 29, 1921
The Hon. William Richard Motherwell	Dec. 29, 1921
The Hon. James Murdock	Dec. 29, 1921
The Hon. John Ewan Sinclair	Dec. 30, 1921
The Hon. James H. King	Feb. 3, 1922
The Hon. Edward Mortimer Macdonald	April 12, 1923
The Hon. Edward James McMurray	Nov. 14, 1923
The Hon. Pierre Joseph Arthur Cardin[3]	Jan. 30, 1924
The Hon. George Newcombe Gordon	Sept. 7, 1925
The Hon. Sir Herbert Marler[6]	Sept. 9, 1925
The Hon. Charles Vincent Massey[7]	Sept. 16, 1925
The Hon. Walter Edward Foster	Sept. 26, 1925
The Hon. Philippe Roy	Feb. 9, 1926
The Hon. Charles A. Dunning[3]	Mar. 1, 1926
The Hon. John C. Elliott[3]	Mar. 8, 1926
The Hon. George Burpee Jones	July 13, 1926
The Hon. Donald Sutherland	July 13, 1926
The Hon. Raymond Ducharme Morand	July 13, 1926
The Hon. John Alexander Macdonald	July 13, 1926
The Hon. Eugène Paquet	Aug. 23, 1926
The Hon. Guillaume André Fauteux	Aug. 23, 1926
The Hon. Lucien Cannon	Sept. 25, 1926
The Hon. William D. Euler[3]	Sept. 25, 1926
The Hon. Fernand Rinfret[3]	Sept. 25, 1926
The Hon. Peter Heenan	Sept. 25, 1926
The Hon. James Layton Ralston	Oct. 8, 1926
H.R.H. The Duke of Windsor	Aug. 2, 1927
The Rt. Hon. Earl Baldwin of Bewdley	Aug. 2, 1927
The Hon. William Frederick Kay	June 17, 1930
The Hon. Cyrus Macmillan	June 17, 1930
The Hon. Ian Alistair Mackenzie[3]	June 27, 1930
The Hon. Arthur C. Hardy	July 31, 1930
The Hon. Arthur Sauvé	Aug. 7, 1930
The Hon. Murray MacLaren	Aug. 7, 1930
The Hon. Hugh Alexander Stewart	Aug. 7, 1930
The Hon. Charles Hazlitt Cahan	Aug. 7, 1930
The Hon. Donald Matheson Sutherland	Aug. 7, 1930
The Hon. Alfred Duranleau	Aug. 7, 1930
The Hon. Thomas Gerow Murphy	Aug. 7, 1930
The Hon. Maurice Dupré	Aug. 7, 1930
The Hon. Wesley Ashton Gordon	Aug. 7, 1930
The Hon. G. Howard Ferguson	Jan. 14, 1931
The Hon. W. D. Herridge	June 17, 1931
The Hon.. Robert Charles Matthews	Dec. 6, 1933
The Hon. Richard Burpee Hanson	Nov. 17, 1934
The Hon. Grote Stirling	Nov. 17, 1934
The Hon. George Reginald Geary	Aug. 14, 1935
The Hon. William Gordon Ernst	Aug. 14, 1935
The Hon. James Earl Lawson	Aug. 14, 1935
The Hon. Samuel Gobeil	Aug. 14, 1935
The Hon. Lucien Henri Gendron	Aug. 30, 1935
The Hon. William Earl Rowe	Aug. 30, 1935
The Hon. Onésime Gagnon	Aug. 30, 1935
The Hon. Charles Gavan Power[3]	Oct. 23, 1935
The Hon. James Lorimer Ilsley[3]	Oct. 23, 1935
The Hon. Joseph Enoil Michaud[3]	Oct. 23, 1935
The Hon. Norman McLeod Rogers[3]	Oct. 23, 1935
The Hon. Clarence Decatur Howe[3]	Oct. 23, 1935
The Hon. James Garfield Gardiner[3]	Nov. 4, 1935
The Hon. Norman Alexander McLarty[3]	Jan. 23, 1939
The Hon. James Angus MacKinnon[3]	Jan. 23, 1939

---

[1] As in the case of Privy Councillors of the United Kingdom, members of His Majesty's Privy Council for Canada take rank *inter se* according to the dates of their being sworn in. [2] Ranks as retired Chief Justice of Canada. [3] Ranks as a member of the Cabinet. [4] Ranks as the Prime Minister of Canada. [5] Ranks as the Leader of the Opposition. [6] Canadian Ministers abroad. [7] High Commissioner in Great Britain.

In Table 4 are given the dates of the opening and prorogation of the sessions of the various Dominion Parliaments from 1867 to 1939.

4.—Duration and Sessions of Dominion Parliaments, 1867-1939.

Order of Parliament.	Session.	Date of Opening.	Date of Prorogation.	Days of Session.	Date of Election, Writs Returnable, Dissolution and Length of Parliament.[1]
1st Parliament	1st	Nov. 1, 1867	May 22, 1868	18[2]	Aug., Sept., 1867.[3] Sept. 24, 1867.[4] July 8, 1872.[5] 4 y., 9 m., 15 d.[6]
	2nd	April 15, 1869	June 22, 1869	69	
	3rd	Feb. 15, 1870	May 12, 1870	87	
	4th	Feb. 15, 1871	April 14, 1871	59	
	5th	April 11, 1872	June 14, 1872	65	
2nd Parliament	1st	Mar. 5, 1873	Aug. 13, 1873	81[7]	July, Aug., Sept., 1872.[3] Sept. 3, 1872.[4] Jan. 2, 1874.[5] 1 y., 4 m., 0 d.[6]
	2nd	Oct. 23, 1873	Nov. 7, 1873	16	
3rd Parliament	1st	Mar. 26, 1874	May 26, 1874	62	Jan. 22, 1874[3] Feb. 21, 1874.[4] Aug. 17, 1878.[5] 4 y., 5 m., 25 d.[6]
	2nd	Feb. 4, 1875	April 8, 1875	64	
	3rd	Feb. 10, 1876	April 12, 1876	63	
	4th	Feb. 8, 1877	April 28, 1877	80	
	5th	Feb. 7, 1878	May 10, 1878	93	
4th Parliament	1st	Feb. 13, 1879	May 15, 1879	92	Sept. 17, 1878.[3] Nov. 21, 1878.[4] May 18, 1882.[5] 3 y., 5 m., 28 d.[6]
	2nd	Feb. 12, 1880	May 7, 1880	86	
	3rd	Dec. 9, 1880	Mar. 21, 1881	103	
	4th	Feb. 9, 1882	May 17, 1882	98	
5th Parliament	1st	Feb. 8, 1883	May 25, 1883	107	June 20, 1882.[3] Aug. 7, 1882.[4] Jan. 15, 1887.[5] 4 y., 5 m., 10 d.[6]
	2nd	Jan. 17, 1884	April 19, 1884	94	
	3rd	Jan. 29, 1885	July 20, 1885	173	
	4th	Feb. 25, 1886	June 2, 1886	98	
6th Parliament	1st	April 13, 1887	June 23, 1887	72	Feb. 22, 1887.[3] April 7, 1887.[4] Feb. 3, 1891.[5] 3 y., 9 m., 27 d.[6]
	2nd	Feb. 23, 1888	May 22, 1888	90	
	3rd	Jan. 31, 1889	May 2, 1889	92	
	4th	Jan. 16, 1890	May 16, 1890	121	
7th Parliament	1st	April 29, 1891	Sept. 30, 1891	155	Mar. 5, 1891.[3] April 25, 1891.[4] April 24, 1896.[5] 5 y., 0 m., 0 d.[6]
	2nd	Feb. 25, 1892	July 9, 1892	136	
	3rd	Jan. 26, 1893	April 1, 1893	66	
	4th	Mar. 15, 1894	July 23, 1894	131	
	5th	April 18, 1895	July 22, 1895	96	
	6th	Jan. 2, 1896	April 23, 1896	111	
8th Parliament	1st	Aug. 19, 1896	Oct. 5, 1896	48	June 23, 1896.[3] July 13, 1896.[4] Oct. 9, 1900.[5] 4 y., 2 m., 26 d.[6]
	2nd	Mar. 25, 1897	June 29, 1897	97	
	3rd	Feb. 3, 1898	June 13, 1898	131	
	4th	Mar. 16, 1899	Aug. 11, 1899	149	
	5th	Feb. 1, 1900	July 18, 1900	168	
9th Parliament	1st	Feb. 6, 1901	May 23, 1901	107	Nov. 7, 1900.[3] Dec. 5, 1900.[4] Sept. 29, 1904.[5] 3 y., 9 m., 26 d.[6]
	2nd	Feb. 13, 1902	May 15, 1902	90	
	3rd	Mar. 12, 1903	Oct. 24, 1903	227	
	4th	Mar. 10, 1904	Aug. 10, 1904	154	
10th Parliament	1st	Jan. 11, 1905	July 20, 1905	191	Nov. 3, 1904.[3] Dec. 15, 1904.[4] Sept. 17, 1908.[5] 3 y., 9 m., 4 d.[6]
	2nd	Mar. 8, 1906	July 13, 1906	128	
	3rd	Nov. 22, 1906	April 27, 1907	157	
	4th	Nov. 28, 1907	July 20, 1908	236	
11th Parliament	1st	Jan. 20, 1909	May 19, 1909	120	Oct. 26, 1908.[3] Dec. 3, 1908.[4] July 29, 1911.[5] 2 y., 7 m., 28 d.[6]
	2nd	Nov. 11, 1909	May 4, 1910	175	
	3rd	Nov. 17, 1910	July 29, 1911	196[8]	
12th Parliament	1st	Nov. 15, 1911	April 1, 1912	139	Sept. 21, 1911.[3] Oct. 7, 1911.[4] Oct. 6, 1917.[5] 6 y., 0 m., 0 d.[6]
	2nd	Nov. 21, 1912	June 6, 1913	173[9]	
	3rd	Jan. 15, 1914	June 12, 1914	148	
	4th	Aug. 18, 1914	Aug. 22, 1914	5	
	5th	Feb. 4, 1915	April 15, 1915	71	
	6th	Jan. 12, 1916	May 18, 1916	127	
	7th	Jan. 18, 1917	Sept. 20, 1917	207[10]	
13th Parliament	1st	Mar. 18, 1918	May 24, 1918	68	Dec. 17, 1917.[3] Feb. 27, 1918.[4] Oct. 4, 1921.[5] 3 y., 7 m., 6 d.[6]
	2nd	Feb. 20, 1919	July 7, 1919	138	
	3rd	Sept. 1, 1919	Nov. 10, 1919	71	
	4th	Feb. 26, 1920	July 1, 1920	127	
	5th	Feb. 14, 1921	June 4, 1921	111	

---

[1] The ordinary legal limit of duration for each Parliament is five years. [2] Adjourned from Dec. 21, 1867, to Mar. 12, 1868, to allow the local legislatures to meet. [3] Period of general elections. [4] Writs returnable. [5] Dissolution of Parliament. [6] Duration of Parliament in years, months, and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. [7] Adjourned May 23 until Aug. 13. [8] Not including days (59) of adjournment from May 19 to July 18. [9] Not including days (25) of adjournment from Dec. 19, 1912, to Jan. 14, 1913. [10] Not including days (39) of adjournment from Feb. 7 to Mar. 19, 1917.

4.—Duration and Sessions of Dominion Parliaments, 1867-1939—concluded.

Order of Parliament.	Session.	Date of Opening.	Date of Prorogation.	Days of Session.	Date of Election, Writs Returnable, Dissolution and Length of Parliament.[1]
14th Parliament	1st	Mar. 8, 1922	June 28, 1922	113	Dec. 6, 1921.[2]
	2nd	Jan. 31, 1923	June 30, 1923	151	Jan. 14, 1922.[3]
	3rd	Feb. 28, 1924	July 19, 1924	143	Sept. 5, 1925.[4]
	4th	Feb. 5, 1925	June 27, 1925	143	3 y., 7 m., 26 d.[5]
15th Parliament	1st	Jan. 7, 1926	July 2, 1926	177[6]	Oct. 29, 1925.[2] Dec. 7, 1925.[3] July 2, 1926.[4] 6 m., 26 d.[5]
16th Parliament	1st	Dec. 9, 1926	April 14, 1927	73[7]	Sept. 14, 1926.[2]
	2nd	Jan. 26, 1928	June 11, 1928	138	Nov. 2, 1926.[3]
	3rd	Feb. 7, 1929	June 14, 1929	128	May 30, 1930.[4]
	4th	Feb. 20, 1930	May 30, 1930	100	3 y., 7 m., 0 d.[5]
17th Parliament	1st	Sept. 8, 1930	Sept. 22, 1930	15	
	2nd	Mar. 12, 1931	Aug. 3, 1931	145	July 28, 1930.[2]
	3rd	Feb. 4, 1932	May 26, 1932	113	Aug. 18, 1930.[3]
	4th	Oct. 6, 1932	May 27, 1933	169[8]	Aug. 15, 1935.[4]
	5th	Jan. 25, 1934	July 3, 1934	160	4 y., 11 m., 29 d.[5]
	6th	Jan. 17, 1935	July 5, 1935	170	
18th Parliament	1st	Feb. 6, 1936	June 23, 1936	139	Oct. 14, 1935.[2]
	2nd	Jan. 14, 1937	April 10, 1937	87	Nov. 9, 1935.[3]
	3rd	Jan. 27, 1938	July 1, 1938	156	
	4th	Jan. 12, 1939	[9]	[9]	

---

[1] The ordinary legal limit of duration for each Parliament is five years. [2] Period of general elections. [3] Writs returnable. [4] Dissolution of Parliament. [5] Duration of Parliament in years, months, and days. The life of a Parliament is counted from the date of return of election writs to the date of dissolution, both days inclusive. [6] Including days (13) of adjournment from Mar. 3 to Mar. 15. [7] Not including days (54) of adjournment from Dec. 15 to Feb. 8. [8] Not including days (65) of adjournment from Nov. 25 to Jan. 30. [9] Not available at the time of going to press.

Subsection 3.—The Senate.

The British North America Act, 1867, provides in Sections 21 and 22 that "the Senate shall consist of seventy-two members, who shall be styled Senators.* In relation to the constitution of the Senate, Canada shall be deemed to consist of three divisions—(1) Ontario; (2) Quebec; (3) The Maritime Provinces—Nova Scotia, and New Brunswick; which three divisions shall be equally represented in the Senate as follows: Ontario by twenty-four senators; Quebec by twenty-four senators; and the Maritime Provinces by twenty-four senators, twelve thereof representing New Brunswick and twelve thereof representing Nova Scotia. In the case of Quebec, each of the twenty-four senators representing the province shall be appointed for one of the electoral divisions of Lower Canada, specified in Schedule A to Chapter I of the Consolidated Statutes of Canada". Further, under Sec. 147 of the same Act, it is provided that "in the case of the admission to Confederation of Newfoundland or Prince Edward Island, . . . each shall be entitled to a representation in the Senate of four members. Prince Edward Island, when admitted, shall be deemed to be comprised in the third of the three divisions into which Canada is divided by this Act" and on its admission "the representation of Nova Scotia and New Brunswick shall, as vacancies occur, be reduced from twelve to ten members, respectively". In case of the admission of Newfoundland, the normal membership of the Senate of 72 members was to be increased to 76, while the maximum number of 78 (Sec. 28) was to be 82, Sec. 26 containing a provision for the appointment of three or six additional members in certain cases, to represent equally the three divisions of Canada.

---

* A senator's sessional indemnity is $4,000.

By 33 Vict., c. 3, an Act to establish and provide for the government of the province of Manitoba, passed in 1870, the newly formed province was given representation of two members in the Senate, provision being made at the same time for increases in representation to three and four on increases of population, according to the decennial census, to 50,000 and 75,000, respectively. In the following year, British Columbia, on being admitted to the Union by an Imperial Order in Council of May 16, 1871, was given representation by three senators. Two years later, when Prince Edward Island was admitted to Confederation by an Imperial Order in Council of June 26, 1873, it was granted representation in the Senate of four members under the terms of the British North America Act, as cited above. Thus, in 1873, the seven provinces—Ontario, Quebec, Nova Scotia, New Brunswick, Manitoba, British Columbia, and Prince Edward Island—were represented by a total of 77 members in the Senate, their individual representation at the time being 24, 24, 10, 10, 2, 3, and 4 members, respectively.

In 1882, following the Census of 1881 and an increase of population in Manitoba to 62,260 persons, the representation of this province was increased to three members under authority of the Manitoba Act, 1870. Later, by 50-51 Vict., c. 38, an Act of 1887, the representation of the Northwest Territories in the Senate was fixed at two members. A subsequent increase resulted from the growth of population in Manitoba to 152,506, as shown by the Census of 1891, the province being granted a fourth senator under the terms of the Manitoba Act of 1870. An Act passed in the session of 1903 (3 Edw. VII, c. 42) provided for an increase in the representation of the Northwest Territories from two to four members, bringing the total representation at this date to 83 members.

On the establishment of the provinces of Alberta and Saskatchewan out of the former Northwest Territories in 1905, under 4-5 Edw. VII, cc. 3 and 42, provision was made for their representation in the Senate by 4 members each, which might be increased by Parliament to 6 on the completion of the next decennial census. This change in representation brought the membership of the Upper Chamber to a total of 87.

In 1915, by an amendment to the British North America Act (5-6 Geo. V, c. 45), an important change was made with regard to the constitution of the Senate. The number of divisions provided for by Section 22 of the original Act was increased from three to four, the fourth comprising the four western provinces of Manitoba, Saskatchewan, Alberta, and British Columbia. Each of these provinces was to be represented by 6 members under the Act, the division being thus represented by 24 members and placed on an equality with the others with respect to membership. A corresponding change was made in the number of additional senators provided for by the original British North America Act by substituting increases of four or eight members for the three or six cited in Sec. 26 of the Act of 1867. Normal representation, therefore, is at present fixed at 96, which number may be increased if necessary to 100 or to a maximum of 104.

The entry of Newfoundland to the Union is still provided for by the above Act, s-s 6 of Sec. 1 of which would allow it a representation of six members instead of the four granted by the Act of 1867. If Newfoundland were admitted to the Dominion, the normal number of senators would, therefore, be 102 with a maximum of 110.

In Table 5 the growth of membership in the Senate is shown by divisions and provinces from 1867 to 1915, since when no change has taken place. The names and addresses of the senators from each province are given, as at Mar. 15, 1939, in Table 6.

5.—Growth of Representation in the Senate, 1867-1939.

Province.	1867.	1870.	1871.	1873.	1882.	1887.	1892.	1903.	1905.	1915-1939.
(1) Ontario	24	24	24	24	24	24	24	24	24	24
(2) Quebec	24	24	24	24	24	24	24	24	24	24
(3) Maritime Provinces	24	24	24	24	24	24	24	24	24	24
Nova Scotia	12	12	12	10	10	10	10	10	10	10
New Brunswick	12	12	12	10	10	10	10	10	10	10
Prince Edward Island	–	–	–	4	4	4	4	4	4	4
(4) Western Provinces	–	2	5	5	6	8	9	11	15	24
Manitoba	–	2	2	2	3	3	4	4	4	6
British Columbia	–	–	3	3	3	3	3	3	3	6
Saskatchewan	–	–	–	–	–	2	2	4	4	6
Alberta	–	–	–	–	–				4	6
Totals	**72**	**74**	**77**	**77**	**78**	**80**	**81**	**83**	**87**	**96**

6.—Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1939.

Name of Senator.	Post Office Address.
Prince Edward Island—(4 senators).	
Hughes, James J.	Souris.
MacArthur, Creelman	Summerside.
Sinclair, John E., P.C.	Emerald.
Macdonald, John A., P.C.	Cardigan.
Nova Scotia—(10 senators).	
McLennan, John S.	Sydney.
Tanner, C. E.	Pictou.
Logan, H. J.	Parrsboro.
Dennis, W. H.	Halifax.
MacDonald, J. A.	St. Peters.
Rhodes, Edgar N., P.C.	Amherst.
Cantley, Thomas	New Glasgow.
Quinn, Felix P.	Bedford.
Robicheau, John L. P.	Maxwellton.
Duff, William	Lunenburg.
New Brunswick—(10 senators)	
Bourque, T. J.	Richibucto.
McDonald, J. A.	Shediac.
Black, Frank B.	Sackville.
Turgeon, Onesiphore	Bathurst.
Robinson, C. W.	Moncton.
Copp, A. B., P.C.	Sackville.
Foster, W. E., P.C. (Speaker)	Saint John.
Jones, George B., P.C.	Apohaqui.
Leger, Antoine J.	Moncton.
Smith, Benjamin F.	East Florenceville.
Quebec—(24 senators—five vacancies).	
Dandurand, R., P.C.	Montreal.
Wilson, J. M.	Montreal.
Pope, Rufus H.	Cookshire.
Quebec—concluded.	
Beaubien, C. P.	Montreal.
L'Espérance, D. O.	Quebec.
Blondin, P. E., P.C.	St. François du Lac.
Chapais, Sir Thomas	Quebec.
Webster, L. C.	Montreal.
Raymond, Donat	Montreal.
Parent, G.	Quebec.
Prevost, J.-E.	St. Jérôme.
Ballantyne, C. C.	Montreal.
Rainville, J. H.	St. Lambert.
Fauteux, G. A., P.C.	Outremont.
Moraud, L.	Quebec.
Sauvé, Arthur, P.C.	St. Eustache.
Paquet, Eugène, P.C.	St. Romuald.
Bourgeois, Charles	Three Rivers.
Hugessen, A. K.	Montreal.
Ontario—(24 senators—two vacancies).	
Gordon, George	North Bay.
Smith, E. D.	Winona.
Donnelly, J. J.	Pinkerton.
Lynch-Staunton, G.	Hamilton.
White, G. V.	Pembroke.
Macdonell, A. H., C.M.G.	Toronto.
Hardy, A. C., P.C.	Brockville.
Aylesworth, Sir A. B., P.C.	Toronto.
Graham, Rt. Hon. George P., P.C.	Brockville.
McGuire, William H.	Toronto.
Little, Edgar S.	London.
Lacasse, Gustave	Tecumseh.
Horsey, H. H.	Cressy.
Wilson, Cairine R.	Ottawa.
Murdock, J., P.C.	Ottawa.
Meighen, Rt. Hon. A., P.C.	Toronto.

6.—Representation in the Senate of Canada, by Provinces, as at Mar. 15, 1939—concl.

Name of Senator.	Post Office Address.
Ontario—concluded.	
Coté, L.	Ottawa.
Sutherland, Donald, P.C.	Ingersoll.
Fallis, Iva C.	Peterborough, R.R. No. 3.
O'Connor, Frank P.	Toronto.
Lambert, Norman P.	Ottawa.
Marshall, Duncan M.	Toronto.
Manitoba—(6 senators—one vacancy).	
Sharpe, W. H.	Manitou.
McMeans, L.	Winnipeg.
Molloy, J. P.	Morris.
Mullins, Henry A.	Winnipeg.
Haig, John T.	Winnipeg.
Saskatchewan—(6 senators).	
Laird, H. W.	Regina.
Calder, J. A., P.C.	Regina.
Gillis, A. B.	Whitewood.
Marcotte, A.	Ponteix.
Saskatchewan—concluded.	
Horner, R. B.	Blaine Lake.
Aseltine, W. M.	Rosetown.
Alberta—(6 senators—one vacancy).	
Michener, Edward	Calgary.
Harmer, William J.	Edmonton.
Griesbach, W. A., C.B., C.M.G.	Edmonton.
Buchanan, W. A.	Lethbridge.
Riley, Daniel E.	High River.
British Columbia—(6 senators).	
Barnard, G. H.	Victoria.
Taylor, J. D.	New Westminster.
Green, R. F.	Victoria.
King, J. H., P.C.	Victoria.
McRae, A. D., C.B.	Vancouver.
Farris, J. W.	Vancouver.

Subsection 4.—The House of Commons.

In Section 37 of the original British North America Act of 1867 (30 Vict., c. 3), it was provided that "The House of Commons shall . . consist of one hundred and eighty-one members, of whom eighty-two shall be elected for Ontario, sixty-five for Quebec, nineteen for Nova Scotia and fifteen for New Bunswick".* Further, under Sec. 51, it was enacted that after the completion of the Census of 1871 and of each subsequent decennial census, the representation of the four provinces should be readjusted by such authority, in such manner, and from such time, as the Parliament of Canada provided, subject to and according to the following rules:—

> "(1) Quebec shall have the fixed number of Sixty-five Members;
>
> "(2) There shall be assigned to each of the other Provinces such a Number of Members as will bear the same Proportion to the Number of its Population (ascertained at such Census) as the Number Sixty-five bears to the Number of the Population of Quebec (so ascertained);
>
> "(3) In the Computation of the Number of Members for a Province a fractional Part not exceeding One Half of the whole Number requisite for entitling the Province to a Member shall be disregarded; but a fractional Part exceeding One Half of that Number shall be equivalent to the whole Number;
>
> "(4) On any such Re-adjustment the Number of Members for a Province shall not be reduced unless the Proportion which the Number of the Population of the Province bore to the Number of the aggregate Population of Canada at the then last preceding Re-adjustment of the Number of Members for the Province is ascertained at the then latest Census to be diminished by One Twentieth Part or upwards;
>
> "(5) Such Re-adjustment shall not take effect until the Termination of the then existing Parliament".

---

* The sessional indemnity of a member of the House of Commons is $4,000.

Again, in Sec. 52, it was enacted that "the number of members of the House of Commons may be from time to time increased by the Parliament of Canada, provided the proportionate representation of the Provinces prescribed by this Act is not thereby disturbed".

Later on, by the British North America Act of 1886 (49-50 Vict., c. 35), provision was made in Sec. 1 that "the Parliament of Canada may from time to time make provision for the representation in the Senate and House of Commons of Canada, or in either of them, of any territories which for the time being form part of the Dominion of Canada, but are not included in any province thereof".

Again in 1915, an amendment to the British North America Act (5-6 Geo. V, c. 45) was passed by the Imperial Parliament, providing that "notwithstanding anything in the said Act, a province shall always be entitled to a number of members in the House of Commons not less than the number of senators representing such province".

Readjustments in Representation.—As set out in the above-mentioned provisions of the British North America Act, the representation in the House of Commons has been readjusted following each of the seven decennial censuses since taken, also as a result of the admission of Manitoba, British Columbia, and Prince Edward Island to Confederation and the creation of portions of the Northwest into Saskatchewan, Alberta, and Yukon. At pp. 74-77 of the 1934-35 Year Book, the problems of redistribution are dealt with in detail, especially those arising out of the 1931 Census. Summarized accounts were also carried in later Year Books down to 1937 (see pp. 79 and 80 of the 1937 Year Book).

The number of representatives of each province elected at each of the eighteen general elections since Confederation is given in Table 7.

7.—Representation in the House of Commons as at Dominion General Elections, 1867-1935.

Province.	1867.	1872.	1874.	1878.	1882.	1887.	1891.	1896.	1900.	1904.	1908.	1911.	1917.	1921.	1925.[1]	1935.
Ont.	82	88	88	88	92	92	92	92	92	86	86	86	82	82	82	82
Que.	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
N.S.	19	21	21	21	21	21	21	20	20	18	18	18	16	16	14	12
N.B.	15	16	16	16	16	16	16	14	14	13	13	13	11	11	11	10
Man.	–	4	4	4	5	5	5	7	7	10	10	10	15	15	17	17
B.C.	–	6	6	6	6	6	6	6	6	7	7	7	13	13	14	16
P.E.I.	–	–	6	6	6	6	6	5	5	4	4	4	4	4	4	4
Sask.	–	–	–	–	–	4	4	4	4	10	10	10	16	16	21	21
Alta.	–	–	–	–	–						7	7	12	12	16	17
Yukon	–	–	–	–	–	–	–	–	–	1	1	1	1	1	1	1
Totals	**181**	**200**	**206**	**206**	**211**	**215**	**215**	**213**	**213**	**214**	**221**	**221**	**235**	**235**	**245**	**245**

[1] The representation at the general elections of 1926 and 1930 was the same as in 1925.

The Unit of Representation.—While the number of members of the House of Commons has been growing fairly steadily since Confederation, the unit of representation—one-sixty-fifth of the population of Quebec as taken at each census within its 1911 boundaries—has also been increased after each census in consequence of the growth of the population of Quebec. The units of representation, as determined by the decennial censuses taken since Confederation, are as follows: 1871, 18,331 persons; 1881, 20,908; 1891, 22,901; 1901, 25,368; 1911, 30,819; 1921, 36,283; 1931, 44,186, being one-sixty-fifth of the population of Quebec exclusive of Ungava.

Constituencies and Representatives in the Eighteenth Parliament.—A complete list of the constituencies, with their 1931 populations, the voters on the list and votes polled at the general election of Oct. 14, 1935, together with the names and addresses of those then elected to the House of Commons of the eighteenth Parliament of Canada, will be found in Table 8. Changes occurring at subsequent by-elections to Mar. 15, 1939, are indicated in the footnotes.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Prince Edward Is.— (4 members).						
Kings	19,147	11,536	9,709	Grant, T. V.	Lib.	Montague, P.E.I.
Prince	31,500	18,281	14,355	MacLean, A. E.	Lib.	Summerside, P.E.I.
Queens	37,391	23,465	37,576[1]	Larabee, J. J.[2] Sinclair, P.[3]	Lib. Lib.	Eldon, P.E.I. Charlottetown, P.E.I.
Nova Scotia— (12 members).						
Antigonish-Guysborough	25,516	15,029	11,581	Duff, W.[4]	Lib.	Lunenburg, N.S.
Cape Breton North-Victoria	31,615	17,562	13,965	Cameron, D. A.[5]	Lib.	Sydney, N.S.
Cape Breton South	65,198	34,967	28,472	Hartigan, D. J.	Lib.	New Waterford, N.S.
Colchester-Hants	44,444	27,233	21,064	Purdy, G. T.	Lib.	Truro, N.S.
Cumberland	36,366	22,239	17,270	Cochrane, K. J.	Lib.	Port Greville, N.S.
Digby-Annapolis-Kings	50,859	32,079	23,119	Ilsley, Hon. J. L.	Lib.	Ottawa, Ont.
Halifax	100,204	60,197	85,986[1]	Isnor, G. B. Finn, R. E.	Lib. Lib.	Halifax, N.S. Halifax, N.S.
Inverness-Richmond	35,768	21,207	16,929	McLennan, D.	Lib.	Inverness, N.S.
Pictou	39,018	23,197	19,240	McCulloch, H. B.	Lib.	New Glasgow, N.S.
Queens-Lunenburg	42,286	26,662	19,935	Kinley, J. J.	Lib.	Lunenburg, N.S.
Shelburne-Yarmouth-Clare	41,572	24,044	17,937	Pottier, V. J.	Lib.	Yarmouth, N.S.
New Brunswick— (10 members).						
Charlotte	21,337	13,574	10,622	Hill, B. M.	Lib.	St. Stephen, N.B.
Gloucester	41,914	20,342	15,993	Veniot, Hon. P. J.[6]	Lib.	Bathurst, N.B.
Kent	23,478	12,375	9,628	Robichaud, L. P. A.	Lib.	Richibucto, N.B.
Northumberland	34,124	17,859	13,744	Barry, J. P.	Lib.	Chatham, N.B.
Restigouche-Madawaska	54,386	26,405	17,858	Michaud, Hon. J. E.	Lib.	Ottawa, Ont.
Royal	31,026	19,442	15,723	Brooks, A. J.	Cons.	Sussex, N.B.
St. John-Albert	69,292	41,202	31,948	Ryan, W. M.[7]	Lib.	Saint John, N.B.
Victoria-Carleton	35,703	20,284	15,831	Patterson, J. E. J.	Lib.	Florenceville, N.B.
Westmorland	57,506	32,547	26,177	Emmerson, H. R.	Lib.	Dorchester, N.B.
York-Sunbury	39,453	24,813	19,961	Clark, W. G.	Lib.	Fredericton, N.B.

---

[1] Each voter could vote for two members. [2] Mr. Larabee having accepted an office of emolument under the Crown, Hon. Charles A. Dunning (Lib.) was elected by acclamation, Dec. 31, 1935. [3] Mr. Sinclair died Mar. 8, 1938, and Mr. James L. Douglas (Lib.) was elected by acclamation, Apr. 25, 1938. [4] Mr. W. Duff was appointed to the Senate on Feb. 28, 1936, and Mr. J. R. Kirk (Lib.) was elected by acclamation, Mar. 16, 1936. [5] Mr. Cameron died Sept. 4, 1937, and Mr. Matthew MacLean (Lib.) was elected by acclamation, Oct. 18, 1937. [6] Hon. Mr. Veniot died July 6, 1936, and Mr. C. J. Veniot (Lib.) was elected by acclamation, Aug. 17, 1936. [7] Mr. Ryan died Jan. 4, 1938, and Mr. Allan G. McAvity (Lib.) was elected by acclamation, Feb. 21, 1938.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Quebec— (65 members).						
Argenteuil	19,379	11,122	9,059	Perley, Rt. Hon. Sir George[1]	Cons.	Ottawa, Ont.
Beauce	51,614	24,341	17,363	Lacroix, E.	Lib.	Lacroix, Que.
Beauharnois-Laprairie	42,104	20,580	14,158	Raymond, M.	Lib.	Montreal, Que.
Bellechasse	27,480	13,394	9,313	Boulanger, O. L.	Lib.	Quebec, Que.
Berthier-Maskoningé	35,545	19,650	15,607	Ferron, J. E.	Lib.	Louiseville, Que.
Bonaventure	36,184	18,570	14,589	Marcil, Hon. C.[2]	Lib.	Ottawa, Ont.
Brome-Missisquoi	32,069	18,951	15,225	Gosselin, L.	Lib.	Notre Dame de Stanbridge, Que.
Chambly-Rouville	39,648	23,169	18,385	Dupuis, V.	Lib.	Laprairie, Que.
Champlain	37,526	18,860	15,598	Brunnelle, H. E.	Lib.	Cap de la Madeleine, Centre, Que.
Chapleau	24,328	13,120	9,101	Blais, F., Sr.	Ind.-Lib.	Amos, Que.
Charlevoix-Saguenay	55,594	25,591	18,869	Casgrain, Hon. P. F.	Lib.	Montreal, Que.
Châteauguay-Huntingdon	24,412	13,655	11,163	Black, D. E.	Lib.	Aubrey, Que.
Chicoutimi	55,724	25,558	20,623	Dubuc, J. E. A.	Lib.	Chicoutimi, Que.
Compton	31,858	16,430	13,886	Blanchette, J. A.	Lib.	Chartierville, Que.
Dorchester	27,156	12,775	10,588	Tremblay, L. D.	Lib.	St. Malachie, Que.
Drummond-Arthabaska	53,338	29,246	22,778	Girouard, W.	Lib.	Arthabaska, Que.
Gaspe	47,160	23,116	17,904	Brasset, M.	Lib.	Percé, Que.
Hull	49,196	25,312	21,137	Fournier, A.	Lib.	Hull, Que.
Joliette-L'Assomption-Montcalm	56,444	30,473	18,008	Ferland, C. E.	Lib.	Joliette, Que.
Kamouraska	30,853	15,230	10,514	Bouchard, G.	Lib.	Ste. Anne de la Pocatière, Que.
Labelle	36,953	18,314	12,825	Lalonde, M.	Lib.	Mont Laurier, Que.
Lake St. John-Roberval	50,253	22,690	19,672	Sylvestre, A.	Lib.	Roberval, Que.
Laval-Two Mountains	26,224	13,828	11,649	Lacombe, L.	Lib.	Ste. Scholastique, Que.
Lévis	28,548	14,625	12,770	Dussault, J. E.	Lib.	Lévis, Que.
Lotbinière	38,546	20,377	15,249	Verville, J. A.[3]	Lib.	St. Flavien, Que.
Matapedia-Matane	39,977	18,624	14,433	Lapointe, A. J.	Lib.	Price, Que.
Mégantic-Frontenac	44,440	20,368	16,304	Roberge, E.	Lib.	Laurierville, Que.
Montmagny-L'Islet	30,869	15,636	11,843	Fafard, J. F.	Lib.	L'Islet, Que.
Nicolet-Yamaska	39,219	20,891	16,592	Dubois, L.	Lib.	Gentilly, Que.
Pontiac	43,045	28,139	18,465	McDonald, W. R.	Ind.-Lib.	Chapeau, Que.
Portneuf	37,383	19,051	15,602	Cannon, Hon. L.[4]	Lib.	Quebec, Que.
Quebec East	58,145	30,309	25,413	Lapointe, Rt. Hon. E.	Lib.	Ottawa, Ont.
Quebec South	33,441	22,829	18,167	Power, Hon. C. G.	Lib.	Ottawa, Ont.
Quebec West and South	43,617	23,339	19,358	Parent, C.	Lib.	Quebec, Que.
Quebec-Montmorency	40,274	20,386	17,359	Lacroix, W.	Lib.	Quebec, Que.
Richelieu-Verchères	35,901	19,965	14,553	Cardin, Hon. P. J. A.	Lib.	Ottawa, Ont.
Richmond-Wolfe	36,568	18,258	14,946	Mullins, J. P.	Lib.	Bromptonville, Que.
Rimouski	40,208	19,827	14,581	Fiset, Sir Eugène	Lib.	Rimouski, Que.
St. Hyacinthe-Bagot	42,820	24,967	16,089	Fontaine, T. A.	Lib.	St. Hyacinthe, Que.
St. Johns-Iberville-Napierville	32,259	18,302	10,910	Rhéaume, M.	Lib.	St. Jean, Que.
St. Maurice-Laflèche	45,450	21,943	16,941	Crête, J. A.	Lib.	Grand'mère, Que.
Shefford	28,262	16,499	13,595	Leclerc, J. H.	Lib.	Granby, Que.
Sherbrooke	37,386	21,980	18,085	Howard, C. B.	Lib.	Sherbrooke, Que.
Stanstead	25,118	14,493	11,765	Davidson, R. G.	Lib.	North Hatley, Que.
Témiscouata	42,679	20,720	15,347	Pouliot, J. F.	Lib.	Rivière du Loup, Que.
Terrebonne	38,940	20,748	15,389	Parent, L. E.	Lib.	Ste. Agathe, Que.
Three Rivers	44,223	25,547	20,587	Gariépy, W.	Ind.-Lib.	Trois Rivières, Que.
Vaudreuil-Soulanges	21,114	11,643	8,848	Thauvette, J.	Lib.	Vaudreuil, Que.
Wright	27,107	14,284	10,783	Perras, F. W.[5]	Lib.	Gracefield, Que.

---

[1] Rt. Hon. Sir George Perley died Jan. 4, 1938, and Mr. Georges Heon (Con.) was elected Feb. 28, 1938. [2] Hon. Charles Marcil died Jan. 22, 1937, and Mr. P. E. Côté (Lib.) was elected Mar. 22, 1937. [3] Mr. Verville died Nov. 20, 1937, and Mr. Joseh N. Francoeur (Lib.) was elected Dec. 27, 1937. [4] Hon. Mr. Cannon having accepted an office of emolument under the Crown, Dr. P. Gauthier (Lib.) was elected by acclamation, Jan. 29, 1936. [5] Mr. Perras died June 28, 1936, and Mr. R. Leduc (Lib.) was elected by acclamation, Aug. 5, 1936.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Quebec—concluded.						
Montreal Island—						
Cartier	61,280	41,373	21,389	Jacobs, S. W.[1]	Lib.	Westmount, Que.
Hochelaga	78,353	44,009	30,685	St.-Père, E. C.	Lib.	Montreal, Que.
Jacques-Cartier	42,671	20,957	16,120	Mallette, V.	Lib.	Pte. Claire, Que.
Laurier	68,784	41,228	28,134	Bertrand, E.	Lib.	Westmount, Que.
Maisonneuve-Rosemount	64,845	35,419	26,148	Fournier, S.	Lib.	Montreal, Que.
Mercier	66,651	34,906	24,706	Jean, J.	Lib.	Montreal, Que.
Mount Royal	65,012	46,133	33,224	Walsh, W. A.	Cons.	Outremont, Que.
Outremont	46,136	28,805	20,616	Vien, T.	Lib.	Montreal, Que.
St. Ann	38,673	20,565	15,803	Hushion, W. J.	Lib.	Westmount, Que.
St. Antoine-Westmount	50,009	35,330	22,322	White, R. S.	Cons.	Westmount, Que.
St. Denis	76,930	44,945	31,049	Denis, A.	Lib.	Montreal, Que.
St. Henry	78,127	42,550	30,096	Mercier, P.[2]	Lib.	Montreal, Que.
St. James	89,374	54,768	37,672	Rinfret, Hon. F.	Lib.	Ottawa, Ont.
St. Lawrence-St. George	40,213	22,549	14,329	Cahan, Hon. C. H.	Cons.	Montreal, Que.
St. Mary	77,472	46,473	32,951	Deslauriers, H.	Lib.	Montreal, Que.
Verdun	63,144	36,298	25,347	Wermenlinger, E. J.	Cons.	Verdun, Que.
Ontario—(82 members).						
Algoma East	27,925	14,472	10,627	Farquhar, T.	Lib.	Mindemoya, Ont.
Algoma West	35,618	20,098	14,949	Hamilton, H. S.	Lib.	Sault Ste. Marie, Ont.
Brant	21,202	12,257	9,725	Wood, G. E.	Lib.	Cainsville, Ont.
Brantford City	32,274	20,969	16,897	Macdonald, W. R.	Lib.	Brantford, Ont.
Bruce	29,842	18,899	14,992	Tomlinson, W. R.	Lib.	Port Elgin, Ont.
Carleton	31,305	19,603	16,311	Hyndman, A. B.	Cons.	Carp, Ont.
Cochrane	58,284	34,225	19,976	Bradette, J. A.	Lib.-Lab.	Cochrane, Ont.
Dufferin-Simcoe	27,394	20,612	15,654	Rowe, Hon. W. E.[3]	Cons.	Newton Robinson, Ont.
Durham	25,782	17,084	13,964	Rickard, W. F.	Lib.	Newcastle, Ont.
Elgin	43,436	29,376	22,694	Mills, W. H.	Lib.	Sparta, Ont.
Essex East	51,718	26,223	19,467	Martin, P.	Lib.	Walkerville, Ont.
Essex South	31,970	18,088	13,144	Clark, S. M.	Lib.	Harrow, Ont.
Essex West	75,350	41,726	26,630	McLarty, Hon. N. A.	Lib.	Windsor, Ont.
Fort William	34,656	17,352	13,895	McIvor, D.	Lib.	Fort William, Ont.
Frontenac-Addington	26,455	17,398	14,512	Campbell, C. A.[4]	Lib.	Northbrook, Ont.
Glengarry	18,666	11,073	8,858	MacRae, J. D.	Lib.	Apple Hill, Ont.
Grenville-Dundas	32,425	22,044	17,199	Casselman, A. C.	Cons.	Prescott, Ont.
Grey-Bruce	35,736	23,384	18,110	Macphail, A. C. (Miss)	U.F.O.-Lab.	Ceylon, Ont.
Grey North	35,407	23,096	17,908	Telford, W. P.	Lib.	Owen Sound, Ont.
Haldimand	21,428	13,927	11,388	Senn, M. C.	Cons.	Caledonia, Ont.
Halton	26,558	17,539	13,262	Cleaver, H.	Lib.	Burlington, Ont.
Hamilton East	66,771	40,725	28,421	Brown, A. A.	Cons.	Hamilton, Ont.
Hamilton West	56,305	33,926	23,961	Wilton, H. E.[5]	Cons.	Hamilton, Ont.
Hastings-Peterborough	27,160	16,956	12,910	Ferguson, R. S.	Lib.	Norwood, Ont.
Hastings South	39,327	25,122	20,603	Cameron, C. A.	Lib.	Belleville, Ont.
Huron North	26,095	17,897	14,067	Deachman, R. J.	Lib.	Wingham, Ont.
Huron-Perth	22,661	14,672	10,847	Golding, W. H.	Lib.	Seaforth, Ont.
Kenora-Rainy River	39,834	21,892	14,656	McKinnon, H. B.	Lib.	Kenora, Ont.
Kent	50,994	29,576	18,964	Rutherford, J. W.[6]	Lib.	Chatham, Ont.
Kingston City	26,180	17,022	13,367	Rogers, Hon. N. M.	Lib.	Ottawa, Ont.
Lambton-Kent	34,686	20,953	15,246	McKenzie, H. A.	Lib.	Watford, Ont.
Lambton West	32,601	20,912	15,157	Gray, R. W.	Lib.	Sarnia, Ont.
Lanark	32,856	21,478	17,763	Thompson, T. A.	Cons.	Almonte, Ont.
Leeds	35,157	22,975	19,229	Stewart, Hon. H. A.	Cons.	Brockville, Ont.
Lincoln	54,199	34,429	26,425	Lockhart, N. J. M.	Cons.	St. Catharines, Ont.
London	59,821	41,777	30,522	Betts, F. C.[7]	Cons.	London, Ont.
Middlesex East	34,788	22,073	16,012	Ross, D. G.	Lib.	Lucan, Ont.

---

[1] Mr. Jacobs died Aug. 21, 1938, and Mr. Peter Bercovitch (Lib.) was elected by acclamation Nov .7, 1938. [2] Mr. Mercier having accepted an office of emolument under the Crown, Mr. Joseph A. Bonnier (Lib.) was elected Jan. 17, 1938. [3] Hon. Mr. Rowe resigned Sept. 28, 1937, and was re-elected by acclamation Nov. 8, 1937. [4] Mr. Campbell resigned Aug. 11, 1937, and Mr. Angus N. McCallum (Lib.) was elected by acclamation Nov. 1, 1937. [5] Mr. Wilton died Jan. 31, 1937, and Mr. J. A. Marsh (Lib.) was elected Mar. 22, 1937. [6] Mr. Rutherford died Feb. 27, 1939. [7] Major Betts died May 3, 1938, and Hon. R. J. Manion (Con.) was elected Nov. 14, 1938.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Ontario—concluded.						
Middlesex West	23,632	15,269	11,719	Elliott, Hon. J. C.	Lib.	Ottawa, Ont.
Muskoka-Ontario	35,513	23,038	17,428	Furniss, S. J.	Lib.	Brechin, Ont.
Nipissing	88,597	47,661	33,649	Hurtubise, J. R.	Lib.	Sudbury, Ont.
Norfolk	31,359	19,842	14,521	Taylor, W. H.	Lib.	Scotland, Ont.
Northumberland	30,727	20,291	16,583	Fraser, W. A.	Lib.	Trenton, Ont.
Ontario	45,139	27,291	20,947	Moore, W. H.	Lib.	Dunbarton, Ont.
Ottawa East	51,667	33,259	26,406	Chevrier, E. R. E.[1]	Lib.	Ottawa, Ont.
Ottawa West	78,656	55,759	44,671	Ahearn, T. F.	Lib.	Ottawa, Ont.
Oxford	47,825	30,825	24,119	Rennie, A. S.	Lib.	Tillsonburg, Ont.
Parry Sound	26,198	15,526	11,543	Slaght, A. G.	Lib.	Toronto, Ont.
Peel	28,156	19,203	16,045	Graydon, G.	Cons.	Brampton, Ont.
Perth	47,816	30,670	23,705	Sanderson, F. G.	Lib.	St. Mary's, Ont.
Peterborough West	37,042	23,566	19,022	Duffus, J. J.	Lib.	Peterborough, Ont.
Port Arthur	35,313	17,607	12,623	Howe, Hon. C. D.	Lib.	Ottawa, Ont.
Prescott	24,596	13,665	11,343	Bertrand, E. O.	Lib.	L'Orignal, Ont.
Prince Edward-Lennox	28,697	18,958	15,056	Tustin, G. J.	Cons.	Napanee, Ont.
Renfrew North	27,230	16,033	12,212	McKay, M.[2]	Lib.	Pembroke, Ont.
Renfrew South	26,986	15,800	11,960	McCann, J. J.	Lib.	Renfrew, Ont.
Russell	26,899	14,761	11,717	Goulet, A.	Lib.	Bourget, Ont.
Simcoe East	36,572	21,154	16,385	McLean, G. A.	Lib.	Orillia, Ont.
Simcoe North	29,224	18,849	14,608	McCuaig, D. F.	Lib.	Barrie, Ont.
Stormont	32,524	20,627	17,036	Chevrier, L.	Lib.	Cornwall, Ont.
Timiskaming	37,594	23,306	15,890	Little, W.	Lib.	Kirkland Lake, Ont.
Victoria	31,841	21,338	17,060	McNevin, B.	Lib.	Omemee, Ont.
Waterloo North	53,777	32,847	20,369	Euler, Hon. W. D.	Lib.	Ottawa, Ont.
Waterloo South	36,075	22,823	16,912	Edwards, A. M.[3]	Cons.	Galt, Ont.
Welland	82,731	47,069	34,614	Damude, A. B.	Lib.	Fonthill, Ont.
Wellington North	27,677	16,319	12,876	Blair, J. K.	Lib.	Arthur, Ont.
Wellington South	35,856	22,614	16,987	Gladstone, R. W.	Lib.	Guelph, Ont.
Wentworth	66,943	40,840	30,488	Lennard, F. E., Jr.	Cons.	Dundas, Ont.
York East	66,194	46,215	33,703	McGregor, R. H.	Cons.	Toronto, Ont.
York North	43,323	26,146	20,000	Mulock, W. P.	Lib.	Toronto, Ont.
York South	60,350	42,998	31,237	Lawson, Hon. J. E.	Cons.	Toronto, Ont.
York West	55,881	34,491	25,930	Streight, J. E. L.	Lib.	Toronto, Ont.
City of Toronto—						
Broadview	57,523	39,804	28,053	Church, T. L.	Cons.	Toronto, Ont.
Danforth	41,824	29,034	21,135	Harris, J. H.	Cons.	Toronto, Ont.
Davenport	57,039	40,454	27,772	MacNicol, J. R.	Cons.	Toronto, Ont.
Eglinton	54,859	43,147	31,894	Baker, R. L.	Cons.	Toronto, Ont.
Greenwood	57,296	39,087	27,878	Massey, D.	Cons.	Toronto, Ont.
High Park	52,971	37,590	27,550	Anderson, A. J.	Cons.	Toronto, Ont.
Parkdale	51,398	34,956	24,408	Spence, D.	Cons.	Toronto, Ont.
Rosedale	53,081	36,755	23,793	Clarke, H. G.	Cons.	Toronto, Ont.
St. Paul's	62,283	45,113	26,821	Ross, D. G.	Cons.	Toronto, Ont.
Spadina	82,127	52,154	34,318	Factor, S.	Lib.	Toronto, Ont.
Trinity	60,806	39,642	26,973	Plaxton, H. J.	Lib.	Toronto, Ont.
Manitoba— (17 members).						
Brandon	40,483	22,262	17,059	Beaubier, D. W.[4]	Cons.	Brandon, Man.
Churchill	32,133	13,863	9,084	Crerar, Hon. T. A.	Lib.	Ottawa, Ont.
Dauphin	37,703	20,501	15,405	Ward, W. J.	Lib.	Dauphin, Man.
Lisgar	30,547	14,212	10,282	Winkler, H. W.	Lib.	Morden, Man.
Macdonald	34,948	18,567	14,290	Weir, W. G.	Lib.-Prog	Carman, Man.
Marquette	37,468	20,842	15,849	Glen, J. A.	Lib.	Russell, Man.
Neepawa	28,346	16,450	12,767	MacKenzie, F. D.	Lib.	Neepawa, Man.
Portage la Prairie	25,569	13,846	11,015	Leader, H.	Lib.	Portage la Prairie, Man.
Provencher	32,613	13,163	10,179	Beaubien, A. L.	Lib.	St. Jean Baptiste, Man.
St. Boniface	31,289	16,483	13,082	Howden, J. P.	Lib.	Norwood Grove, Man.
Selkirk	52,222	26,411	19,650	Thorson, J. T.	Lib.-Prog	Winnipeg, Man.
Souris	25,094	13,051	10,675	McDonald, G. W.	Lib.	Boissevain, Man.
Springfield	42,350	21,276	14,593	Turner, J. M.	Lib.	Winnipeg, Man.
Winnipeg North	74,762	37,761	29,321	Heaps, A. A.	C.C.F.	Winnipeg, Man.

---

[1] Mr. Chevrier having accepted an office of emolument under the Crown, Mr. J. A. Pinard (Lib.) was elected, Oct. 26, 1936. [2] Dr. McKay died Feb. 14, 1937, and Mr. R. M. Warren (Lib.) was elected April 5, 1937. [3] Mr. Edwards died June 3, 1938, and Mr. Karl K. Homuth (Con.) was elected Nov. 14, 1938. [4] Mr. Beaubier died Sept. 1, 1938, and Mr. J. E. Matthews (Lib.) was elected Nov. 14, 1938.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—continued.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
Manitoba—concluded.						
Winnipeg North Centre.	59,004	34,253	24,797	Woodsworth, J. S...	C.C.F....	Winnipeg, Man.
Winnipeg South.........	51,518	31,260	25,085	Mutch, L. A........	Lib.......	Winnipeg, Man.
Winnipeg South Centre..	64,090	41,373	31,456	Maybank, R........	Lib.......	Fort Garry, Man.
Saskatchewan—(21 members).						
Assiniboia..............	41,036	18,838	14,975	McKenzie, R.[1]......	Lib.......	Stoughton, Sask.
Humboldt..............	41,172	20,049	15,120	Fleming, H. R......	Lib.......	Humboldt, Sask.
Kindersley..............	39,632	17,797	13,891	Elliott, O. B........	Soc. Cr...	Edmonton, Alta.
Lake Centre............	42,532	19,169	15,441	Johnston, J. F.......	Lib.......	Bladworth, Sask.
Mackenzie..............	46,171	23,534	15,417	MacMillan, J. A.....	Lib.......	Wadena, Sask.
Maple Creek............	42,428	19,572	15,023	Evans, C. R........	Lib.......	Piapot, Sask.
Melfort.................	40,687	24,567	19,004	McLean, M.........	Lib.......	Eldersley, Sask.
Melville................	48,910	23,175	18,455	Motherwell, Hon. W. R.............	Lib.......	Abernethy, Sask.
Moose Jaw..............	43,668	21,562	16,505	Ross, J. G..........	Lib.......	Moose Jaw, Sask.
North Battleford.......	41,513	22,925	15,718	McIntosh, C. R.....	Lib.......	North Battleford, Sask.
Prince Albert...........	39,869	21,082	16,724	King, Rt. Hon. W. L. M...........	Lib.......	Ottawa, Ont.
Qu'Appelle..............	38,015	19,391	15,809	Perley, E. E........	Cons......	Wolseley, Sask.
Regina City............	53,209	30,823	24,969	McNiven, D. A.....	Lib.......	Regina, Sask.
Rosetown-Biggar........	40,512	18,735	15,277	Coldwell, M. J. W...	C.C.F....	Regina, Sask.
Rosthern...............	43,885	19,152	13,291	Tucker, W. A.......	Lib.......	Rosthern, Sask.
Saskatoon City.........	47,362	26,137	19,415	Young, A. M........	Lib.......	Saskatoon, Sask.
Swift Current...........	46,447	19,206	14,787	Bothwell, C. E.....	Lib.......	Swift Current, Sask.
The Battlefords.........	45,064	23,576	18,415	Needham, J........	Soc. Cr...	Unity, Sask.
Weyburn................	44,710	19,635	16,290	Douglas, T. C.......	C.C.F....	Weyburn, Sask.
Wood Mountain.........	44,558	18,871	15,046	Donnelly, T. F......	Lib.......	Meyronne, Sask.
Yorkton................	50,405	23,333	17,951	McPhee, G. W......	Lib.......	Yorkton, Sask.
Alberta—(17 members).						
Acadia..................	37,423	16,054	10,594	Quelch, V...........	Soc. Cr...	Morrin, Alta.
Athabaska..............	39,102	19,438	10,576	Rowe, P. J..........	Soc. Cr...	Peterborough, Ont.
Battle River............	41,881	21,221	13,613	Fair, R.............	Soc. Cr...	Paradise Valley, Alta.
Bow River..............	44,491	20,680	14,317	Johnston, C. E......	Soc. Cr...	Three Hills, Alta.
Calgary East...........	44,745	25,372	18,184	Landeryou, J. C.....	Soc. Cr...	Calgary, Alta.
Calgary West...........	41,418	24,915	18,361	Bennett, Rt. Hon. R. B.[2]...........	Cons......	Ottawa, Ont.
Camrose................	42,717	20,247	13,392	Marshall, J. A......	Soc. Cr...	Bashaw, Alta.
Edmonton East.........	46,086	24,956	16,449	Hall, W. S.[3].........	Soc. Cr...	Edmonton, Alta.
Edmonton West.........	39,712	25,917	18,134	MacKinnon, J. A....	Lib.......	Edmonton, Alta.
Jasper-Edson............	47,394	25,316	14,835	Kuhl, W. F.........	Soc. Cr...	Spruce Grove, Alta.
Lethbridge..............	44,708	18,018	12,898	Blackmore, J. H....	Soc. Cr...	Raymond, Alta.
Macleod................	44,325	20,456	14,583	Hansell, E. G.......	Soc. Cr...	Vulcan, Alta.
Medicine Hat...........	40,986	18,506	13,099	Mitchell, A. H......	Soc. Cr...	Medicine Hat, Alta.
Peace River............	43,761	22,442	11,756	Pelletier, R. A......	Soc. Cr...	Falher, Alta.
Red Deer...............	39,758	21,978	13,378	Poole, E. J.........	Soc. Cr...	Calgary, Alta.
Vegreville..............	47,168	20,678	13,620	Hayhurst, W........	Soc. Cr...	Vegreville, Alta.
Wetaskiwin.............	45,330	22,524	13,302	Jaques, N...........	Soc. Cr...	Mirror, Alta.
British Columbia—(16 members).						
Cariboo.................	26,094	15,197	10,480	Turgeon, J. G.......	Lib.......	Vancouver, B.C.
Comox-Alberni..........	28,379	13,533	10,041	Neill, A. W.........	Ind.......	Alberni, B.C.
Fraser Valley...........	31,377	16,579	12,758	Barber, H. J........	Cons......	Chilliwack, B.C.
Kamloops..............	29,249	16,085	11,296	O'Neill, T. J........	Lib.......	Kamloops, B.C.
Kootenay East..........	25,662	12,668	10,175	Stevens, Hon. H. H.	Recon....	Ottawa, Ont.

---

[1] Mr. McKenzie having accepted an office of emolument under the Crown, Mr. J. G. Gardiner (Lib.) was elected Jan. 6, 1936. [2] Rt. Hon. Mr. Bennett resigned Jan. 28, 1939. [3] Mr. Hall died Jan. 26, 1938, and Mr. O. A. Kennedy (Soc. Cr.) was elected Mar. 21, 1938.

8.—Electoral Districts, Voters on List and Votes Polled, Names and Addresses of Members of the House of Commons, as Elected at the Eighteenth General Election, Oct. 14, 1935—concluded.

Province and Electoral District.	Population, 1931.	Voters on List.	Votes Polled.	Name of Member.	Party Affiliation.	P.O. Address.
British Columbia— concluded.						
Kootenay West	32,556	15,508	11,824	Esling, W. K.	Cons.	Rossland, B.C.
Nanaimo	45,767	26,155	20,431	Taylor, J. S.	C.C.F.	Vancouver, B.C.
New Westminster	59,170	33,749	27,280	Reid, T.	Lib.	Newton, B.C.
Skeena	30,391	11,741	8,382	Hanson, O.	Lib.	Prince Rupert, B.C.
Vancouver-Burrard	59,583	36,044	28,483	McGeer, G. G.	Lib.	Vancouver, B.C.
Vancouver Centre	65,683	32,425	22,789	Mackenzie, Hon. I. A.	Lib.	Ottawa, Ont.
Vancouver East	58,921	34,310	27,105	MacInnis, A.	C.C.F.	Vancouver, B.C.
Vancouver North	48,906	28,121	21,804	MacNeil, C. G.	C.C.F.	Vancouver, B.C.
Vancouver South	63,122	39,274	31,251	Green, H. C.	Cons.	Vancouver, B.C.
Victoria	48,599	28,902	21,585	Plunkett, D. B.[1]	Cons.	Victoria, B.C.
Yale	40,804	21,777	16,640	Stirling, Hon. G.	Cons.	Kelowna, B.C
Yukon— (1 member).						
Yukon	4,230	1,805	1,265	Black, M. L. (Mrs.)	Ind-Cons.	Ottawa, Ont.

[1] Mr. Plunkett died May 3, 1936, and Hon. S. F. Tolmie (Cons.) was elected June 8, 1936. Hon. Mr. Tolmie died, Oct. 13, 1937, and Mr. Robert W. Mayhew (Lib.) was elected Nov. 29, 1937.

Subsection 5.—The Dominion Franchise.

An article by Col. J. T. C. Thompson, Dominion Franchise Commissioner, appeared at pp. 86-88 of the 1937 edition of the Year Book. Briefly, the qualifications for the Dominion franchise are that one must be a British subject, of the full age of 21 years, and have been ordinarily resident in Canada for at least one year, and resident for three months in the electoral district in which application is being made for registration.

The Use of the Franchise.—The numbers of voters on the lists and the numbers of votes polled at the general elections of 1925, 1926, 1930, and 1935 are given in Table 9.

9.—Numbers of Voters and Votes Polled at the General Elections of 1925, 1926, 1930, and 1935.

Province.	Numbers of Voters on the Lists.				Numbers of Votes Polled.			
	1925.	1926.	1930.	1935.	1925.	1926.	1930.	1935.
P.E. Island	45,454	46,208	46,985	53,284	49,558[1]	55,569[1]	59,519[1]	61,641[1]
Nova Scotia	277,073	273,712	275,762	304,313	222,883[2]	229,846[2]	268,727[2]	275,523[2]
New Brunswick	211,190	210,028	207,006	229,266	152,652[3]	162,777[3]	186,277[3]	177,485
Quebec	1,124,998	1,133,633	1,351,585[4]	1,576,458	805,492	809,295	1,029,480[4]	1,162,862
Ontario	1,821,906	1,847,512	1,894,624	2,174,188	1,223,027[5]	1,226,267[5]	1,364,960[5]	1,608,244
Manitoba	250,505	257,244[4]	328,089	377,733	171,124	198,028[4]	235,192	284,589
Saskatchewan	346,791	353,471	410,400	451,386	197,246	246,460	331,652	347,536
Alberta	283,529	279,463	304,475[4]	368,956	161,423	157,993	201,635[4]	241,107
British Columbia	244,352	262,262	333,326	382,117	183,748	185,345	243,631	292,423
Yukon	1,621	1,848	1,719	1,805	1,259	1,482	1,408	1,265
Totals	**4,607,419**	**4,665,381**[4]	**5,153,971**[6]	**5,919,506**	**3,168,412**	**3,273,062**[4]	**3,922,481**[6]	**4,452,675**

[1] Each voter in the double member constituency of Queens County, P.E.I., had two votes; in 1935, 23,467 voters on the list cast 37,576 votes. [2] Each voter in the double member constituency of Halifax, N.S., had two votes; in 1935, 60,503 voters on the list cast 85,986 votes. [3] Each voter in the double member constituency of St. John-Albert, N.B., had two votes; in 1930, 37,067 voters on the list cast 50,121 votes. [4] Not including one electoral district in which the return was by acclamation. [5] Each voter in the double member constituency of Ottawa, Ont., had two votes; in 1930, 61,535 voters on the list cast 97,369 votes. [6] Not including two electoral districts in which the returns were by acclamation.

Section 2.—Provincial Governments.

Table **10** gives the names and areas, as in 1939, of the several provinces, territories, and provisional districts of the Dominion, together with the dates of their creation or admission into the Confederation and the legislative process by which this was effected.

10.—Provinces and Territories of Canada, with Present Areas, Dates of Admission to Confederation, and Legislative Process by which Admission was Effected.

Province, Territory, or District.	Date of Admission or Creation.	Legislative Process.	Present Area (square miles).		
			Land.	Fresh Water.	Total.
Ontario	July 1, 1867	Act of Imperial Parliament — The British North America Act, 1867 (30-31 Vict., c. 3), and Imperial Order in Council of May 22, 1867	363,282	49,300	412,582[1]
Quebec	" 1, 1867		523,534	71,000	594,534[2]
Nova Scotia	" 1, 1867		20,743	325	21,068
New Brunswick	" 1, 1867		27,473	512	27,985
Manitoba	" 15, 1870	Manitoba Act, 1870 (33 Vict., c. 3) and Imperial Order in Council, June 23, 1870	219,723	26,789	246,512[3]
British Columbia	" 20, 1871	Imperial Order in Council, May 16, 1871	359,279	6,976	366,255
P.E. Island	" 1, 1873	Imperial Order in Council, June 26, 1873	2,184	[4]	2,184
Saskatchewan	Sept. 1, 1905	Saskatchewan Act, 1905 (4-5 Edw. VII, c. 42)	237,975	13,725	251,700[5]
Alberta	" 1, 1905	Alberta Act, 1905 (4-5 Edw. VII, c. 3)	248,800	6,485	255,285[5]
Yukon	June 13, 1898	Yukon Territory Act, 1898 (61 Vict., c. 6)	205,346	1,730	207,076
Mackenzie	Jan. 1, 1920	Order in Council, Mar. 16, 1918	493,225	34,265	527,490[6]
Keewatin	" 1, 1920		218,460	9,700	228,160[6]
Franklin	" 1, 1920		546,532	7,500	554,032
		Totals	**3,466,556**	**228,307**	**3,694,863**

---

[1] The area of Ontario was extended by the Ontario Boundaries Extension Act, 1912 (2 Geo. V, c. 40).

[2] Extended by Quebec Boundaries Extension Act, 1912 (2 Geo. V, c. 45), and diminished in consequence of the award of the Judical Committee of the British Privy Council (Mar. 1, 1927), whereby some 112,400 square miles of territory, formerly considered as part of Quebec, were assigned to Newfoundland.

[3] Extended by Extension of Boundaries of Manitoba Act, 1881, and Manitoba Boundaries Extension Act, 1912 (2 Geo. V, c. 32).

[4] Too small to be enumerated.

[5] Alberta and Saskatchewan now cover approximately the area formerly comprised in the districts of Assiniboia, Athabaska, Alberta, and Saskatchewan, established May 17, 1882, by minute of Canadian P.C., concurred in by Dominion Parliament and Order in Council of Oct. 2, 1895.

[6] By Order in Council, June 23, 1870, Rupert's Land, acquired under the Rupert's Land Acts of 1867 and 1868, and the undefined Northern Territories were admitted into the Confederation. The original Northwest Territories, mentioned in the Manitoba Act, 1870, were established by the Northwest Territories Act, 1880 (43 Vict., c. 25), the district of Keewatin having been previously defined by an Act of the Dominion Parliament (39 Vict., c. 21). The provisional districts of Yukon, Mackenzie, Franklin, and Ungava were defined in an Order in Council of Oct. 2, 1895, their boundaries being changed by Order in Council of Dec. 18, 1897. By Order in Council of July 24, 1905, the area of Keewatin, not included in the Northwest Territories, was annexed to the latter from Sept. 1, 1905. By the Extension of Boundaries Act, 1912, Ungava was made a part of the province of Quebec, and the remaining area of the Northwest Territories south of 60° N. latitude was divided between Manitoba and Ontario.

In each of the provinces the King is represented by a Lieutenant-Governor appointed by the Governor General in Council and governs with the advice and assistance of his Ministry or Executive Council, which is responsible to the Legislature and resigns office when it ceases to enjoy the confidence of that body. The Legislatures of all the provinces with the exception of Quebec are now unicameral, consisting of a Legislative Assembly elected by the people. In Quebec there is a Legislative Council as well as a Legislative Assembly. For detailed description of the Provincial Governments, the reader is referred to pp. 101-115 of the 1922-23 edition of the Year Book.

The Lieutenant-Governors of the provinces, together with the names of the Ministers of the present administrations, are given in Table **11**. Details regarding Provincial Legislatures and Ministries from Confederation to 1924 were given on pp. 75-84 of the 1924 Year Book, and for 1924-37 on pp. 110-118 of the 1938 Year Book.

11.—Lieutenant-Governors of Provinces, 1867-1938, and Present Ministries.

Note.—The Lieutenant-Governor of a province is styled "His Honour" and is also styled "Honourable" throughout his life. Legislatures from Confederation to 1923 will be found on pp. 75-84 of the 1924 Year Book, and for 1924-37 at pp. 110-118 of the 1938 Year Book.

PRINCE EDWARD ISLAND.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
W. C. F. Robinson	June 10, 1873	D. A. Mackinnon	Oct. 3, 1904
Sir Robert Hodgson	July 4, 1874	Benjamin Rogers	June 1, 1910
Thomas H. Haviland	July 14, 1879	A. C. Macdonald	June 2, 1915
Andrew Archibald Macdonald	Aug. 1, 1884	Murdock McKinnon	Sept. 3, 1919
Jedediah S. Carvell	Sept. 21, 1889	Frank R. Heartz	Sept. 8, 1924
George W. Howlan	Feb. 21, 1894	Charles Dalton	Nov. 29, 1930
P. A. McIntyre	May 13, 1899	George D. DeBlois	Dec. 28, 1933

Twenty-First Ministry.

Office.	Name.	Date of Appointment.
Premier, Provincial Secretary-Treasurer, Attorney and Advocate General	Hon. Thane A. Campbell, K.C., LL.D.	Aug. 15, 1935 Jan. 14, 1936
Minister of Public Works and Highways	Hon. James P. McIntyre	Aug. 15, 1935
President of the Executive Council	Hon. Bradford W. LePage	Jan. 14, 1936
Minister of Agriculture	Hon. William H. Dennis	Jan. 14, 1936
Minister of Education and Public Health	Hon. Mark R. McGuigan, K.C.	Aug. 15, 1935
Minister without Portfolio	Hon. Lucas R. Allen	Aug. 15, 1935
Minister without Portfolio	Hon. John A. Campbell	Aug. 15, 1935
Minister without Portfolio	Hon. Marin Gallant	Aug. 15, 1935
Minister without Portfolio	Hon. T. William L. Prowse	Aug. 15, 1935

NOVA SCOTIA.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
Lt.-Gen. Sir William F. Williams	July 1, 1867	Duncan C. Fraser	Mar. 27, 1906
Major-Gen. Sir C. Hastings Doyle	Oct. 18, 1867	James D. McGregor	Oct. 18, 1910
Lt.-Gen. Sir C. Hastings Doyle	Jan. 31, 1868[1]	David MacKeen	Oct. 19, 1915
Joseph Howe	May 1, 1873	MacCallum Grant	Nov. 29, 1916
Sir Adams G. Archibald	July 4, 1873	MacCallum Grant	Mar. 21, 1922[1]
Matthew Henry Richey	July 4, 1883	J. Robson Douglas	Jan. 23, 1925
A. W. McLelan	July 9, 1888	James C. Tory	Sept. 24, 1925
Sir Malachy Bowes Daly	July 11, 1890	Frank Stanfield	Dec. 2, 1930
Sir Malachy Bowes Daly	July 29, 1895[1]	Walter H. Covert	Oct. 5, 1931
Alfred G. Jones	Aug. 7, 1900	Robert Irwin	May 1, 1937

[1] Second term.

Twelfth Ministry.

Office.	Name.	Date of Appointment.
Premier and President of Council, Provincial Secretary and Treasurer	Hon. Angus Lewis Macdonald, K.C.	Sept. 5, 1933
Attorney General, Minister of Lands and Forests and Minister of Municipal Affairs	Hon. Josiah H. MacQuarrie, K.C.	Sept. 5, 1933
Minister of Highways and Public Works	Hon. A. Stirling MacMillan	Sept. 5, 1933
Minister of Agriculture and Marketing	Hon. John A. McDonald	Sept. 5, 1933
Minister of Public Health	Hon. Frank R. Davis, M.D., C.M	Sept. 5, 1933
Minister of Mines and Minister of Labour	Hon. Lauchlin D. Currie, K.C.	Feb. 6, 1939
Minister without Portfolio	Hon. J. Willie Comeau	Sept. 5, 1933

11.—Lieutenant-Governors of Provinces, 1867-1938, and Present Ministries—continued.

NEW BRUNSWICK.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-Gen. Sir C. Hastings Doyle	July 1, 1867	A. R. McClelan	Dec. 9, 1896
Col. F. P. Harding	Oct. 18, 1867	Jabez B. Snowball	Feb. 5, 1902
L. A. Wilmot	July 14, 1868	L. J. Tweedie	Mar. 2, 1907
Samuel Leonard Tilley	Nov. 5, 1873	Josiah Wood	Mar. 6, 1912
E. Baron Chandler	July 16, 1878	G. W. Ganong	June. 29, 1916
Robert Duncan Wilmot	Feb. 11, 1880	William Pugsley	Nov. 6, 1917
Sir Samuel Leonard Tilley	Oct. 31, 1885	William F. Todd	Feb. 24, 1923
John Boyd	Sept. 21, 1893	Major-Gen. Hugh H. McLean	Dec. 28, 1928
John A. Fraser	Dec. 20, 1893	Murray MacLaren	Feb. 5, 1935

TWENTIETH MINISTRY.

Office.	Name.	Date of Appointment.
Premier	Hon. A. A. Dysart, K.C.	July 16, 1935
Minister of Public Works	Hon. W. S. Anderson	July 16, 1938
Minister of Lands and Mines	Hon. F. W. Pirie	July 16, 1935
Minister of Agriculture	Hon. Austin C. Taylor	July 16, 1935
Attorney General	Hon. J. B. McNair, K.C.	July 16, 1935
Minister of Health and Labour	Hon. P. H. LaPorte	July 16, 1938
Provincial Secretary-Treasurer	Hon. C. T. Richard	July 16, 1935
Minister of Education, Federal and Municipal Relations	Hon. A. P. Paterson	July 16, 1935
President, Executive Council	Hon. E. J. Henneberry	July 16, 1938

QUEBEC.

LIEUTENANT-GOVERNORS.

Name.	Date of Appointment.	Name.	Date of Appointment.
Sir Narcisse F. Belleau	July 1, 1867	Sir Charles A.P. Pelletier	Sept. 4, 1908
Sir Narcisse F. Belleau	Jan. 31, 1868[1]	Sir François Langelier	May 5, 1911
René Edouard Caron	Feb. 11, 1873	Sir Pierre Evariste Leblanc	Feb. 9, 1915
Luc Letellier de St-Just	Dec. 15, 1876	Right Hon. Sir Charles Fitzpatrick	Oct. 21, 1918
Théodore Robitaille	July 26, 1879	L. P. Brodeur	Oct. 31, 1923
L. F. R. Masson	Nov. 7, 1884	N. Pérodeau	Jan. 8, 1924
A. R. Angers	Oct. 24, 1887	Sir Lomer Gouin	Jan. 10, 1929
Sir Joseph A. Chapleau	Dec. 5, 1892	H. G. Carroll	April 2, 1929
L. A. Jetté	Feb. 2, 1898	E. L. Patenaude	May 3, 1934
Sir Louis A. Jetté	Feb. 2, 1903[1]		

---

[1] Second term.

EIGHTEENTH MINISTRY.

Office.	Name.	Date of Appointment.
Premier, President of the Council and Attorney General	Hon. Maurice Duplessis	Aug. 24, 1936
Minister of Health and Provincial Secretary	Hon. J. H. A. Paquette	Aug. 24, 1936
Minister of Public Works	Hon. J. S. Bourque	Aug. 24, 1936
Minister of Lands and Forests	Hon. J. S. Bourque	July 27, 1938
Minister of Mines, Game and Fisheries	Hon. Onésime Gagnon	Oct. 6, 1936
Minister of Agriculture	Hon. Bona Dussault	Aug. 24, 1936
Provincial Treasurer	Hon. M. B. Fisher	Aug. 24, 1936
Minister of Municipal Affairs, Trade and Commerce	Hon. J. Bilodeau	Aug. 24, 1936
Minister of Colonization	Hon. H. L. Auger	Aug. 24, 1936
Minister of Labour	Hon. W. Tremblay	Aug. 24, 1936
Minister of Roads	Hon. Anatole Carignan	Nov. 30, 1938
Minister without Portfolio	Hon. Antonio Elie	Aug. 24, 1936
Minister without Portfolio	Hon. Sir Thomas Chapais	Oct. 6, 1936
Minister without Portfolio	Hon. Gilbert Layton	Aug. 24, 1936
Minister without Portfolio	Hon. T. J. Coonan	Aug. 24, 1936

11.—Lieutenant-Governors of Provinces, 1867-1938, and Present Ministries—continued.

ONTARIO.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
Major-General H. W. Stisted	July 1, 1867	Sir William Mortimer Clark	April 20, 1903
W. P. Howland	July 14, 1868	Sir John M. Gibson	Sept. 22, 1908
John W. Crawford	Nov. 5, 1873	Lt.-Col. Sir John S. Hendrie	Sept. 26, 1914
D. A. Macdonald	May 18, 1875	Lionel H. Clarke	Nov. 27, 1919
John Beverly Robinson	June 30, 1880	Col. Henry Cockshutt	Sept. 10, 1921
Sir Alexander Campbell	Feb. 8, 1887	William Donald Ross	Dec. 30, 1926
Sir George A. Kirkpatrick	May 30, 1892	Col. Herbert Alexander Bruce	Oct. 25, 1932
Sir Oliver Mowat	Nov. 18, 1897	Albert Matthews	Nov. 30, 1937

Eleventh Ministry.

Office.	Name.	Date of Appointment.
President of the Council and Treasurer	Hon. Mitchell F. Hepburn	July 10, 1934
Secretary and Registrar	Hon. Harry C. Nixon	July 10, 1934
Minister of Lands and Forests	Hon. Peter Heenan	July 10, 1934
Minister of Education	Hon. Leonard J. Simpson, M.D	July 10, 1934
Minister of Highways	Hon. Thomas B. McQuesten, K.C	July 10, 1934
Minister of Mines	Hon. Paul Leduc, K.C	July 10, 1934
Minister of Health	Hon. Harold J. Kirby, K.C	Oct. 12, 1937
Minister of Labour	Hon. N. O. Hipel	Sept. 2, 1938
Minister of Agriculture	Hon. P. M. Dewan	Oct. 12, 1937
Minister of Public Works	Hon. Colin A. Campbell	Oct. 12, 1937
Attorney General	Hon. Gordon D. Conant, K.C	Oct. 12, 1937
Minister of Municipal Affairs and Public Welfare	Hon. Eric W. B. Cross, K.C	Oct. 12, 1937
Minister without Portfolio	Hon. William L. Houck	Oct. 12, 1937
Minister without Portfolio	Hon. A. St. Clair Gordon	Oct. 12, 1937

MANITOBA.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald	May 20, 1870	Sir Daniel H. McMillan	May 11, 1906[1]
Francis Goodschall Johnson	April 9, 1872	Sir Douglas C. Cameron	Aug. 1, 1911
Alexander Morris	Dec. 2, 1872	Sir James A. M. Aikins	Aug. 3, 1916
Joseph E. Cauchon	Dec. 2, 1877	Sir James A. M. Aikins	Aug. 7, 1921[1]
James C. Aikins	Sept. 22, 1882	Theodore A. Burrows	Oct. 9, 1926
J. C. Schultz	July 1, 1888	J. D. McGregor	Jan. 25, 1929
J. C. Patterson	Sept. 2, 1895	William Johnston Tupper	Nov. 17, 1934
Sir Daniel H. McMillan	Oct. 16, 1900		

[1] Second term.

Twelfth Ministry.

Office.	Name.	Date of Appointment.
Premier, President of the Council, Provincial Secretary, and Railway Commissioner	Hon. John Bracken	Aug. 8, 1922 Jan. 12, 1925
Attorney General, Minister of Telephones and Telegraphs, and Municipal Commissioner	Hon. W. J. Major, K.C	April 29, 1927 Sept. 21, 1936
Minister of Public Works and Labour	Hon. W. R. Clubb	Aug. 8, 1922
Minister of Agriculture and Immigration	Hon. D. L. Campbell	Sept. 21, 1936
Minister of Education	Hon. Ivan Schultz, K.C	Sept. 21, 1936
Minister of Health and Public Welfare	Hon. I. B. Griffiths	May 28, 1935
Minister of Mines and Natural Resources	Hon. J. S. McDiarmid	May 27, 1932
Provincial Treasurer	Hon. S. S. Garson, K.C	Sept. 21, 1936
Minister without Portfolio	Hon. S. Marcoux	Sept. 21, 1936

11.—Lieutenant-Governors of Provinces, 1867-1938, and Present Ministries—continued.

SASKATCHEWAN.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. E. Forget	Sept. 1, 1905	H. W. Newlands	Feb. 22, 1926[1]
George W. Brown	Oct. 5, 1910	Lt.-Col. H. E. Munroe, O.B.E.	Mar. 31, 1931
Sir Richard Stuart Lake	Oct. 6, 1915	A. P. McNab	Oct. 1, 1936
H. W. Newlands	Feb. 17, 1921		

[1] Second term.

Seventh Ministry.

Office.	Name.	Date of Appointment.
Premier, President of the Council, Provincial Treasurer, and Minister of Telephones and Telegraphs	Hon. W. J. Patterson	Nov. 1, 1935
Attorney General and Minister in Charge of the Loan Companies Act and Trust Companies Act	Hon. T. C. Davis, K.C.	July 19, 1934
Minister of Public Health and Minister of Public Works	Hon. J. M. Uhrich, M.D.	July 19, 1934
Minister of Education, and Minister in Charge of the Saskatchewan Power Commission Act.	Hon. J. W. Estey, K.C.	July 19, 1934
Minister of Agriculture	Hon. J. G. Taggart, B.S.A.	July 19, 1934
Minister of Municipal Affairs, Minister in Charge of the Employment Agencies Act, the Minimum Wage Act, and Bureau of Labour and Public Welfare	Hon. R. J. M. Parker	July 19, 1934
Minister of Natural Resources and Minister in Charge of the Saskatchewan Insurance Act, the Fire Prevention Act, and the Prairie and Forest Fires Act	Hon. W. F. Kerr	Nov. 5, 1935
Minister of Highways and Transportation, Minister in Charge of the Child Welfare Act, and the Old Age Pensions Act	Hon. A. T. Procter	Dec. 1, 1938
Provincial Secretary, and Minister in Charge of the Theatres and Cinematographs Act, the Provincial Tax Commission Act, The Public Printing Act, and the Bureau of Publications	Hon. E. M. Culliton	Dec. 1, 1938

ALBERTA.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
George H. V. Bulyea	Sept. 1, 1905	William Egbert	Oct. 20, 1925
George H. V. Bulyea	Oct. 5, 1910[1]	William L. Walsh	April 24, 1931
Robert George Brett	Oct. 6, 1915	Philip C. H. Primrose	Oct. 1, 1936
Robert George Brett	Oct. 20, 1920[1]	J. C. Bowen	Mar. 20, 1937

[1] Second term.

Seventh Ministry.

Office.	Name.	Date of Appointment.
Premier and Minister of Education	Hon. William Aberhart	Sept. 3, 1935
Attorney General	Hon. William Aberhart	Sept. 15, 1937
Provincial Treasurer	Hon. Solon Low	Feb. 2, 1937
Minister of Lands and Mines	Hon. Nathan E. Tanner	Jan. 5, 1937
Minister of Agriculture	Hon. D. B. Mullen	May 1, 1937
Minister of Public Works and Minister of Railways and Telephones	Hon. William A. Fallow	Sept. 3, 1935
Minister of Health	Hon. W. W. Cross, M.D.	Sept. 3, 1935
Provincial Secretary and Minister of Trade and Industry	Hon. E. C. Manning	Sept. 3, 1935
Minister of Municipal Affairs	Hon. Lucien Maynard	Jan. 20, 1937

11.—Lieutenant-Governors of Provinces, 1867-1938, and Present Ministries—concluded.

BRITISH COLUMBIA.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
J. W. Trutch	July 20, 1871	T. W. Patterson	Dec. 3, 1909
Albert Norton Richards	July 20, 1876	Sir Frank S. Barnard	Dec. 5, 1914
Clement F. Cornwall	July 20, 1881	Col. Edward G. Prior	Dec. 9, 1919
Hugh Nelson	Feb. 8, 1887	Walter C. Nichol	Dec. 24, 1920
Edgar Dewdney	Nov. 1, 1892	R. Randolph Bruce	Jan. 21, 1926
Thomas R. McInnes	Nov. 18, 1897	J. W. Fordham Johnson	Aug. 1, 1931
Sir Henri G. Joly de Lotbinière	June 21, 1900	Eric W. Hamber	May 1, 1936
James Dunsmuir	May 11, 1906		

Twenty-Second Ministry.

Office.	Name.	Date of Appointment.
Premier and President of Executive Council	Hon. T. D. Pattullo	Nov. 15, 1933
Minister of Finance	Hon. John Hart	Nov. 15, 1933
Provincial Secretary and Minister of Education	Hon. G. M. Weir	Nov. 15, 1933
Attorney General	Hon. G. S. Wismer	July 5, 1937
Minister of Lands and Municipalities	Hon. A. Wellesley Gray	Nov. 15, 1933
Minister of Agriculture	Hon. K. C. MacDonald	Nov. 15, 1933
Minister of Railways and Labour and Commissioner of Fisheries	Hon. G. S. Pearson	Nov. 15, 1933
Minister of Public Works	Hon. F. M. MacPherson	Nov. 15, 1933
Minister of Mines and Trade and Industry	Hon. W. J. Asseltine	Dec. 23, 1937

THE TERRITORIES.

Note.—In 1888 the districts of Alberta, Assiniboia, Athabaska, and Saskatchewan, then called the Northwest Territories, with their capital at Regina, were given local responsible government, and the old Northwest Council was replaced by the Northwest Legislature, which existed until Aug. 31, 1905. When the area included in these districts was formed into the provinces of Alberta and Saskatchewan, on Sept. 1, 1905, these provinces were given systems of government similar to the other provinces of the Dominion. The remaining areas (Yukon and the provisional districts of Franklin, Keewatin, and Mackenzie) are now administered by the Lands, Parks and Forests Branch, Department of Mines and Resources. The Deputy Minister of the Department is the Commissioner of the Northwest Territories, which comprises the three provisional districts.

Lieutenant-Governors.

Name.	Date of Appointment.	Name.	Date of Appointment.
A. G. Archibald	May 10, 1870	Joseph Royal	July 1, 1888
Francis Goodschall Johnson	April 9, 1872	C. H. Mackintosh	Oct. 31, 1893
Alexander Morris	Dec. 2, 1872	M. C. Cameron	May 30, 1898
David Laird	Oct. 7, 1876	A. E. Forget	Oct. 11, 1898
Edgar Dewdney	Dec. 3, 1881	A. E. Forget	Mar. 30, 1904[1]

[1] Second term.

PART IV.—REPRESENTATIVES IN OTHER COUNTRIES.*

Section 1.—Representatives Within the Empire.

The policy of the early North American colonies, of maintaining in London accredited representatives for business and diplomatic purposes, was recognized in the eighteenth century as being a more satisfactory means of communication with the British Government than that provided by occasional official visits or by correspondence. Of the Canadian colonies, Nova Scotia was the first to adopt this plan, its Legislature having appointed an Agent in London in 1761. New Brunswick was similarly represented in 1786, Upper Canada as early as 1794, Lower Canada in 1812 and British Columbia in 1857. Following Confederation, several of the provinces continued to adhere to, and in certain cases enlarge upon, the practice to the extent of themselves appointing Crown Agents or Agents General. Such developments as have taken place are dealt with on p. 92 of the 1934-35 Year Book.

The High Commissioner for Canada.—With the federation of the provinces of British North America in 1867, a new political entity which could not avail itself of the services of the provincial Agents was brought into existence. To supplement the ordinary method of communication between the Canadian and British Governments, which at that time was by correspondence between the Governor General and the Secretary of State for the Colonies, the position of High Commissioner for Canada was created in 1880 (see R.S.C. 1927, c. 92). A new Act received assent on June 24, 1938, and under its provisions the duties of the office are defined as follows:—

> "The High Commissioner shall—
>
> "(a) act as representative and resident agent of Canada in the United Kingdom, and in that capacity, execute such powers and perform such duties as are, from time to time, conferred upon and assigned to him by the Governor in Council;
>
> "(b) carry out such instructions as he, from time to time, receives from the Secretary of State for External Affairs respecting the general interests of Canada in the United Kingdom;
>
> "(c) subject to the provisions of the preceding paragraphs, supervise the official activities of the various agencies of the Canadian Government in the United Kingdom."

SIR ALEXANDER GALT was the first Canadian High Commissioner, holding office from May 11, 1880, until May, 1883; in 1884 he was succeeded by SIR CHARLES TUPPER. Lord Strathcona and Mount Royal was appointed in 1896. SIR GEORGE H. PERLEY took charge of the High Commissioners' Office in 1914 and was appointed High Commissioner on Oct. 12, 1917. The HON. P. C. LARKIN was appointed in February, 1922, and after his decease (Feb. 3, 1930) the HON. G. HOWARD FERGUSON was appointed (Nov. 28, 1930). On Nov. 8, 1935, the HON. VINCENT MASSEY succeeded Mr. Ferguson in this post. The office of the High Commissioner for Canada is in Canada House, Trafalgar Square, London, S.W. 1.

High Commissioner of the United Kingdom in Canada.—His Majesty's Government in the United Kingdom in April, 1928, appointed a High Commissioner in Canada, SIR WILLIAM H. CLARK, who was succeeded in January, 1935 by SIR FRANCIS FLOUD, K.C.B. On May 17, 1938, the appointment of SIR GERALD CAMPBELL, K.C.M.G., in succession to Sir Francis Floud was announced. The High

---

* Revised by the Department of External Affairs, Ottawa. An annual report on the organization and activities of Canadian Government representation abroad is contained in the Report of the Department of External Affairs, which may be obtained from the King's Printer, price 25 cents.

Commissioner resides in Ottawa, and his position corresponds to that of the High Commissioner for Canada in the United Kingdom. This appointment was made in consequence of discussions at the Imperial Conference of 1926. The relevant passage in the report of the Inter-Imperial Relations Committee runs as follows:—

"A special aspect of the question of consultation which we considered was that concerning the representation of Great Britain in the Dominions. By reason of his constitutional position, as explained in Section IV (b) of this report, the Governor General is no longer the representative of His Majesty's Government in Great Britain. There is no one therefore in the Dominion capitals in a position to represent with authority the views of His Majesty's Government in Great Britain.

"We summed up our conclusions in the following resolution which is submitted for the consideration of the Conference:—

> " 'The Governments represented at the Imperial Conference are impressed with the desirability of developing a system of personal contact, both in London and in the Dominion capitals, to supplement the present system of intercommunication and the reciprocal supply of information on affairs requiring joint consideration. The manner in which any new system is to be worked out is a matter for consideration and settlement between His Majesty's Governments in Great Britain and the Dominions, with due regard to the circumstances of each particular part of the Empire, it being understood that any new arrangements should be supplementary to, and not in replacement of, the system of direct communication from Government to Government and the special arrangements which have been in force since 1918 for communications between Prime Ministers'."

Accredited Representative of the Union of South Africa in Canada.—His Majesty's Government in the Union of South Africa appointed Mr. David de Waal Meyer as their Accredited Representative in Canada on Apr. 1, 1938: Address, 56 Sparks Street, Ottawa.

Section 2.—Diplomatic Representation Abroad.

The Canadian Minister to the United States.—For many years the diplomatic business between Canada and the United States has been steadily increasing as the natural result of the proximity of the two countries and the closeness of the business relationships between their citizens. Before the Great War a former British Ambassador at Washington, Lord Bryce, said that between two-thirds and three-quarters of the work of the British Embassy in the United States was occasioned by Canadian affairs.

In January, 1918, a temporary Canadian War Mission was established at Washington, under the chairmanship of Mr. Lloyd Harris, and was maintained for some years after the close of the War. Though not a formal diplomatic mission, its duties extended to questions usually dealt with through diplomatic channels. After the retirement of this mission, Canada was represented in Washington by Mr. M. M. Mahoney, who acted as agent of the Department of External Affairs, and, through the courtesy of the British Government, occupied an office at the British Embassy.

In 1920, following discussions between the British and Canadian Governments, it was announced that agreement had been reached upon the appointment of a Canadian Minister at Washington, who would act for the British Ambassador in the latter's absence. No appointment was made until Nov. 26, 1926, when, after decision to omit the arrangement that the Canadian Minister should substitute for the British Ambassador, Hon. Vincent Massey was appointed as His Majesty's

Envoy Extraordinary and Minister Plenipotentiary in the United States of America to represent the interests of the Dominion of Canada. Mr. Massey took up his duties in February, 1927, and held office until July 23, 1930. Hon. W. D. Herridge, who was appointed Minister to the United States on Mar. 7, 1931, resigned his appointment Oct. 23, 1935. The Hon. Sir Herbert Marler, K.C.M.G., presented his credentials as Canadian Minister on Oct. 20, 1936. The Canadian Legation in Washington is situated at 1746 Massachusetts Avenue.

The Canadian Minister to France.—For many years the Canadian Government maintained an agency at Paris. The post was first occupied in 1882 by HON. HECTOR FABRE, who also represented for a time the Government of Quebec. After his death HON. PHILIPPE ROY was appointed in May, 1911, with the title of Commissioner General of Canada in France. In 1928 an exchange of Ministers was agreed upon between Canada and France, and in September of that year Hon. Philippe Roy was appointed as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in France to represent the interests of the Dominion of Canada. Mr. Roy resigned in December, 1938, and Lt.-Colonel George P. Vanier, formerly Secretary of the Office of the High Commissioner for Canada in London was appointed in January, 1939, as His Majesty's Canadian Minister in France. The Canadian Legation in Paris is situated at No. 1, rue François premier.

The Canadian Minister to Japan.—In 1928 an exchange of Ministers was agreed upon between the Governments of Canada and Japan, and HON. H. M. MARLER was appointed in 1929 as His Majesty's Envoy Extraordinary and Minister Plenipotentiary in Japan to represent the interests of the Dominion of Canada. On his appointment as Canadian Minister at Washington he was succeeded by the HON. R. RANDOLPH BRUCE, who presented his credentials to the Emperor of Japan on Nov. 7, 1936. Mr. Bruce resigned as Canadian Minister in Japan in December, 1938, and pending the appointment of his successor, MR. E. D. MCGREER, First Secretary in Tokyo is acting as Chargé d'Affaires. The Canadian Legation is at 16 Omote-Cho, Sanchome, Akasaka-Ku, Tokyo.

The Canadian Minister to the Netherlands and to Belgium.—On May 26, 1938, the Prime Minister announced in the House of Commons that Canada intended to open Legations in the Netherlands and Belgium with a single Minister to represent the Dominion in both countries. MR. JEAN DESY, formerly Counsellor on the staff of the Canadian Legation in France was appointed in January, 1939, as Canadian Minister in the Netherlands and Belgium.

The Permanent Delegate of Canada to the League of Nations.—The practice of appointing permanent representatives at Geneva accredited to the League of Nations has been largely followed by those nations which are situated at a distance from Geneva. It was found that, while countries adjacent to the seat of the League were able, without difficulty, to include in the personnel of their delegations to the Assembly and Council various advisers and assistants at a minimum of expense, distant countries were at a disadvantage in this respect. Canada's duties as a member of the Assembly and of the International Labour Conference, and as one of the countries represented on the Governing Body of the International Labour Office, made this disadvantage especially felt. Accordingly, the position of Dominion of Canada Advisory Officer, League of Nations, was created and DR. W. A. RIDDELL was appointed to the post on Jan. 1, 1925. He was succeeded by MR. H. H. WRONG on Oct. 25, 1937. The Canadian Representative is now designated as Permanent Delegate of Canada.

The duties of the Permanent Delegate are "to establish and maintain as close relations as possible with the Secretariats of the League of Nations and the International Labour Office", to "communicate with the Government of Canada as to all matters arising and requiring its attention", and to "act in all such matters in an advisory capacity to the Government of Canada and to delegates from the Government of Canada to conferences arising out of the organizations before-named". The office of the Canadian Permanent Delegate is situated at 41, Quai Wilson, Geneva.

Section 3.—Diplomatic Representation in Canada.

The following list gives the addresses of the legations with the dates of establishment and the present Ministers:—

Legation of the United States of America: (Established 1927.)

Address: Wellington Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary*: (Vacant as at Mar. 26, 1938, Chargé d'Affaires, *ad interim*, Mr. J. F. Simmons.)

Legation of France: (Established 1928.)

Address: 42 Sussex Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary*: Count Robert de Dampierre.

Legation of Japan: (Established 1928.)

Address: 140 Wellington Street, Ottawa. *Envoy Extraordinary and Minister Plenipotentiary*: Baron Tomii.

Legation of Belgium: (Established 1937.)

Address: Stadacona Hall, 395 Laurier Avenue East, Ottawa. 680 Sherbrooke Street West, Montreal. *Envoy Extraordinary and Minister Plenipotentiary*: Baron Silvercruys.

PART V.—CANADA AND THE LEAGUE OF NATIONS.*

The League of Nations is an association of fully self-governing States whose relations are governed by the Covenant. The League of Nations acts through an Assembly and Council composed of representatives of Governments. Fifty-five States are at present Members of the League, as compared with forty-two at the time of the first Assembly in 1920. Canada, as a signatory of the Treaties of Peace, is an original Member of the League.

The League of Nations has two aims: (1) to preserve peace and to seek a settlement of international disputes; and (2) to organize in the most varied spheres co-operation of peoples, with a view to the material and moral welfare of humanity.

The Covenant, which constitutes the fundamental charter of the League of Nations was drafted in 1919 by a Commission of the Peace Conference and inserted at the head of the several Treaties of Peace. It came into force on Jan. 10, 1920.

The Organs of the League.—The organs of the League are:—

(a) The Assembly;
(b) The Council;
(c) The Secretariat;
(d) The International Labour Organization, (see Chapter XIX);
(e) The Permanent Court of International Justice.

---

* The League of Nations Society in Canada, 124 Wellington St., Ottawa, is the authorized agent for the publications of the League of Nations.

The Assembly.—The Assembly consists of representatives of the members of the League, and meets annually in ordinary session each September in Geneva. At the 19th Assembly in September, 1938, the Canadian Delegates were the Right Hon. Ernest Lapointe, Mr. H. Hume Wrong, Mr. Paul Martin, Mr. J. T. Thorson, and Mrs. Nellie McClung.*

The Council.—The Council, which originally consisted of five permanent members and four non-permanent members, now consists of four permanent members (the British Empire, France, Italy, and the U.S.S.R.) together with eleven non-permanent members elected for three years from among the States Members of the League. The non-permanent members of the Council are at present as follows: Ecuador, Poland, and Roumania, terms expiring in 1938; Bolivia, China, Latvia, New Zealand, and Sweden, terms expiring in 1939; Belgium, Iran, and Peru, terms expiring in 1940. Canada was a member of the Council of the League from 1927 to 1930.

The Council, which normally meets four times a year and more frequently if circumstances should require it to do so, may deal at its meetings with any matter within the sphere of action of the League or affecting the peace of the world.

The Secretariat.—The Permanent Secretariat is the Civil Service of the League. The staff is appointed by the Secretary General with the approval of the Council. The officials of the Secretariat of the League are exclusively international officials, having international and not national duties. The first Secretary General, Sir Eric Drummond, who was named in the Annex to the Covenant, resigned in 1933 and was succeeded by M. Joseph Avenol, who is assisted by three Deputy Secretaries General and by one Under-Secretary General.

Permanent Court of International Justice.—The Permanent Court of International Justice was established by the Protocol of Dec. 16, 1920, in accordance with Article 14 of the Covenant of the League of Nations. It is composed of a body of fifteen judges elected by the Assembly and Council of the League of Nations for a term of nine years, and sits at The Hague. The Court is competent to hear and determine any dispute of an international character which the parties thereto submit to it; it may also give an advisory opinion upon any dispute or question referred to it by the Council or the Assembly. Article 36 of the Statute of the Court provides that any State may recognize as compulsory, the jurisdiction of the Court in all or any classes of legal dispute concerning:—

(*a*) The interpretation of a Treaty;

(*b*) Any question of international law;

(*c*) The existence of any fact which, if established, would constitute a breach of an international obligation, and the nature and extent of the reparations to be made for the breach of the international obligation.

Canada has been a member of the Court from its establishment, and in 1929 accepted, subject to certain reservations, the compulsory jurisdiction of the Court in the cases contemplated in Article 36.

The Budget of the League.—The expenditure of the League is covered by the contributions of States Members which are fixed in accordance with a scale which takes into account the population, area, and public revenue of each State concerned. The budget for the year 1939 was 21,698,926 gold francs reduced after taking account of the returnable surplus to 20,648,926 gold francs. This net sum included 10,108,173 gold francs for the work of the Assembly, Council, and Secretariat; 5,605,589 gold francs for the International Labour Organization, and 1,911,338 gold francs for the Permanent Court of International Justice; the balance of 3,023,824 gold francs is allocated to buildings and pensions. Canada's share of this net assessment is 35/927 of the total, or 779,303·90 gold francs.

---

* The Report of the Canadian Delegates to the Nineteenth Assembly of the League of Nations is obtainable from the King's Printer, Ottawa, price 10 cents.

Membership of the League of Nations.—The States which are Members of the League (January, 1939) are as follows:—

Afghanistan
Union of South Africa
Albania
Argentine Republic
Australia
Belgium
Bolivia
Bulgaria
Canada
Chile[1]
China
Colombia
Cuba
Czechoslovakia
Denmark
Dominican Republic
Ecuador
Egypt
Ethiopia
Estonia
Finland
France
Greece
Guatemala
Haiti
Hungary
India
Iran
Iraq
Ireland (Eire)
Italy[1]
Latvia
Liberia
Lithuania
Luxemburg
Mexico, United States of
Netherlands
New Zealand
Norway
Panama
Peru
Poland
Portugal
Roumania
Salvador[1]
Siam
Soviet Socialist Republics, Union of
Spain
Sweden
Switzerland
Turkey
United Kingdom of Great Britain and Northern Ireland
Uruguay
Venezuela[1]
Yugoslavia

---

[1] By a communication dated July 23, 1937, Salvador gave notice of her intention to withdraw from the League of Nations, in accordance with Article 1, paragraph 3, of the Covenant. Italy, Chile, and Venezuela manifested the same intention by communications dated Dec. 11, 1937, May 31, 1938, and July 11, 1938, respectively. In a letter dated Mar. 18, 1938, the Secretary of State for Foreign Affairs of the German Reich informed the Secretary General of the League of Nations that the former Federal State of Austria had ceased to be a Member of the League of Nations on Mar. 13, 1938.

CHAPTER IV.—POPULATION.*

The Population chapter of the Year Book is a *précis* of the results of investigations into the number and the constitution of the population made in the seven censuses of Canada since Confederation, summarizing the growth and distribution of population between 1871 and 1931, as shown by the successive decennial censuses, in regard to the chief matters investigated at the censuses. Owing to the extent of the field covered, it is quite impossible to include in each edition of the Year Book a full digest of population statistics. The policy adopted, therefore, is to maintain the skeleton of the chapter and the historical tables as a permanent feature and build up each section as statistics are available following each census. After complete and accurate summary statistics have been given publicity, the chapter is cut down to skeleton limits, with adequate references, until the next census. The 1934-35 Year Book gave at pp. 98-169 as complete a picture of the 1931 Census statistics as will appear in one Year Book.

Under the Canadian constitution, the legal *raison d'être* of the census is to determine representation in the House of Commons; after each decennial census a redistribution of seats in the House, following the course of the movement of population, is made in the manner described on pp. 58-60 of this volume. But the census, especially since the introduction of methods of mechanical tabulation, has become far more than a mere counting of heads. It is a great periodical stocktaking of the people and their affairs, designed to show as fully as possible the stage which has been reached in the progress of the nation. Thus the numbers, local distribution, age, sex, racial origin, nationality, language, religion, education, housing, and occupations of the people, severally, constitute investigations of enormous importance, to which all the continuous and routine statistics collected in the ordinary course of administration must be related if their full value is to be realized. The census, in fine, rounds out and completes the scheme of information upon which the Government relies in conducting the business of the country.

On account of the requirements as to parliamentary representation and the payment of provincial subsidies, which are based on population, the Canadian census is taken on the *de jure* principle, *i.e.*, each person is counted as belonging to the locality in which he is regularly domiciled, irrespective of where he may be at the date of the enumeration. Under the *de facto* method, adopted in the United Kingdom, each individual is counted as belonging to the locality where he is found on the census date. The *de facto* method is undoubtedly simpler, but the *de jure* plan better portrays the permanent condition of the population. The chief difficulty in the application of the latter method is found in connection with holiday resorts, in the segregation of "visitors" and the tracing of "absentees". A date prior to the opening of the holiday season is accordingly chosen for the date of the census. In the Canadian census, students and inmates of hospitals are assigned to their home localities, while inmates of prisons, gaols, lunatic asylums, etc., are counted where found.

---

* This chapter has been revised by A. J. Pelletier, F.S.S., Chief, Demography Branch, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Population".

Section 1.—Census Statistics of General Population.

Since the creation of the Dominion of Canada, in 1867, decennial censuses have been taken on the *de jure* plan as of the dates April 2, 1871, April 4, 1881, April 5, 1891, April 1, 1901, June 1, 1911, 1921, and 1931. The population of Canada and its percentage distribution as on each date, together with the absolute and percentage increases from decade to decade, are given in Tables **1** to **4** immediately following. The population was given by counties or census divisions on pp. 103-107 of the 1934-35 Year Book and corresponding areas and densities of population for 1931 on pp. 109-110 of the same edition.

1.—Population of Canada, by Provinces and Territories, in the Census Years 1871 to 1931.[1]

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	94,021	108,891	109,078	103,259	93,728	88,615	88,038
Nova Scotia	387,800	440,572	450,396	459,574	492,338	523,837	512,846
New Brunswick	285,594	321,233	321,263	331,120	351,889	387,876	408,219
Quebec	1,191,516	1,359,027	1,488,535	1,648,898	2,005,776[2]	2,360,665[3]	2,874,255
Ontario	1,620,851	1,926,922	2,114,321	2,182,947	2,527,292[2]	2,933,662	3,431,683
Manitoba	25,228	62,260	152,506	255,211	461,394[2]	610,118	700,139
Saskatchewan	-	-	-	91,279	492,432	757,510	921,785
Alberta	-	-	-	73,022	374,295[4]	588,454	731,605
British Columbia	36,247	49,459	98,173	178,657	392,480	524,582	694,263
Yukon	-	-	-	27,219	8,512	4,157	4,230
Northwest Territories[5]	48,000	56,446	98,967	20,129	6,507[2]	7,988	9,723
Canada	**3,689,257**	**4,324,810**	**4,833,239**	**5,371,315**	**7,206,643**	**8,787,949**[3]	**10,376,786**

[1] The population of the Prairie Provinces in 1906, 1916, and 1926 is shown on pp. 127-128 of the 1930 Year Book. For intercensal estimated populations, see table on p. 113. [2] Corrected as a result of the Boundaries Extension Acts, 1912. [3] Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927. The total for Canada includes 485 members of the Royal Canadian Navy who were recorded separately in 1921. [4] Corrected by transfer of population of Fort Smith (368) to Northwest Territories. [5] The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of vast areas to form Alberta, Saskatchewan, and Yukon and to extend the boundaries of Quebec, Ontario, and Manitoba.

2.—Percentage Distribution of Canadian Population, by Provinces and Territories, 1871 to 1931.

Province or Territory.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island	2·55	2·52	2·25	1·92	1·30	1·01	0·85
Nova Scotia	10·51	10·19	9·32	8·56	6·83	5·96	4·94
New Brunswick	7·74	7·43	6·65	6·16	4·88	4·41	3·94
Quebec	32·30	31·42	30·80	30·70	27·83[2]	26·86[3]	27·70
Ontario	43·94	44·56	43·74	40·64	35·07[2]	33·39	33·07
Manitoba	0·68	1·44	3·16	4·75	6·40[2]	6·94	6·75
Saskatchewan	-	-	-	1·70	6·84	8·62	8·88
Alberta	-	-	-	1·36	5·19[4]	6·70	7·05
British Columbia	0·98	1·14	2·03	3·33	5·45	5·97	6·69
Yukon	-	-	-	0·51	0·12	0·05	0·04
Northwest Territories[5]	1·30	1·30	2·05	0·37	0·09[2]	0·09	0·09
Canada	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

For footnotes, see end of Table 1.

3.—Population of Canada, by Provinces and Territories, in 1871 and 1931, Numerical Increase in each Decade from 1871 to 1931, and Total Increase.

Province or Territory.	Population in 1871.	Increase in each Decade from 1871 to 1931.						Population in 1931.	Increase 1871 to 1931.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.		
	No.	No.	No.	No.	No.	No.	No.	No.	No.
P.E. Island	94,021	14,870	187	−5,819	−9,531	−5,113	−577	88,038	−5,983
N.S.	387,800	52,772	9,824	9,178	32,764	31,499	−10,991	512,846	125,046
N.B.	285,594	35,639	30	9,857	20,769	35,987	20,343	408,219	122,625
Que.	1,191,516	167,511	129,508	160,363	356,878	354,889[1]	513,590	2,874,255	1,682,739
Ont.	1,620,851	306,071	187,399	68,626	344,345	406,370	498,021	3,431,683	1,810,832
Man.	25,228	37,032	90,246	102,705	206,183	148,724	90,021	700,139	674,911
Sask.	–	–	–	91,279	401,153	265,078	164,275	921,785	921,785
Alta.	–	–	–	73,022	301,273	214,159	143,151	731,605	731,605
B.C.	36,247	13,212	48,714	80,484	213,823	132,102	169,681	694,263	658,016
Yukon	–	–	–	27,219	−18,707	−4,355	73	4,230	4,230
N.W.T.[2]	48,000	8,446	42,521	−78,838	−13,622	1,481	1,735	9,723	−38,277
Canada	**3,689,257**	**635,553**	**508,429**	**538,076**	**1,835,328**	**1,581,306[1]**	**1,588,837**	**10,376,786**	**6,687,529**

[1] Revised in accordance with the Labrador Award of the Privy Council, Mar. 1, 1927. The total for Canada includes 485 members of the Royal Canadian Navy who were recorded separately in 1921. [2] The decreases shown in the population of the Northwest Territories since 1891 are due to the separation therefrom of vast areas to form Alberta, Saskatchewan, and Yukon and to extend the boundaries of Quebec, Ontario, and Manitoba.

4.—Population of Canada, by Provinces and Territories, in 1871, and Percentage Increase, by Decades, from 1871 to 1931.

Province or Territory.	Population in 1871.	Percentage Increase in each Decade from 1871 to 1931						Percentage Increase in 60 Years.
		1871 to 1881.	1881 to 1891.	1891 to 1901.	1901 to 1911.	1911 to 1921.	1921 to 1931.	
	No.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island	94,021	15·82	0·17	−5·33	−9·23	−5·46	−0·65	−6·36
Nova Scotia	387,800	13·61	2·23	2·04	7·13	6·40	−2·10	32·24
New Brunswick	285,594	12·48	0·01	3·07	6·27	10·23	5·24	42·94
Quebec	1,191,516	14·06	9·53	10·77	21·64	17·69[1]	21·76	141·23
Ontario	1,620,851	18·88	9·73	3·25	15·77	16·08	16·98	111·72
Manitoba	25,228	146·79	144·95	67·34	80·79	32·23	14·75	2,675·25
Saskatchewan	–	–	–	–	439·48	53·83	21·69	–
Alberta	–	–	–	–	412·58	57·22	24·33	–
British Columbia	36,247	36·45	98·49	81·98	119·68	33·66	32·35	1,815·37
Yukon	–	–	–	–	−68·73	−51·16	1·76	–
Northwest Territories[2]	48,000	17·60	75·33	−79·66	−67·67	22·76	21·72	−79·74
Canada	**3,689,257**	**17·23**	**11·76**	**11·13**	**34·17**	**21·94[1]**	**18·08**	**181·27**

For footnotes, see end of Table 3.

Early Censuses.—The credit of taking the first census of modern times belongs to Canada; the year was 1666, the census that of the colony of New France. Still earlier records of settlement at Port Royal (1605) and Quebec (1608) are extant; but the Census of 1666 was a systematic 'nominal' enumeration of the people, taken on the *de jure* principle on a fixed date, showing age, sex, occupation, and conjugal and family condition. A second census in 1667 included the areas under cultivation and the numbers of sheep and cattle. When it is recalled that in Europe the first census dates only from the eighteenth century (those of France and

England from the first year of the nineteenth) and that, in the United States, the census begins only with 1790, the achievement of the primitive St. Lawrence colony in instituting what is to-day one of the principal instruments of government throughout the civilized world, may call for more than passing appreciation.

The Census of 1666 (the results occupy 154 pages in manuscript, and are still to be seen in the Archives of Paris, or in a transcript at Ottawa) showed some 3,215 souls. It was repeated at intervals more or less regularly for a hundred years. By 1685 the total had risen to 12,515, including 1,538 Indians settled in villages and living a civilized life under the supervision of the missionaries. By the end of the century it had passed 15,000, and this was doubled in the next twenty-five years. Not to present too much detail, some of which is in the Chronology on pp. 40-49, it may be said that at the time of the cession (1763) the population of New France was nearly 70,000 (69,810 in 1765), while another 10,000 French (thinned to these proportions by the expulsion of the Acadians) were scattered through what are now Nova Scotia, New Brunswick, and Prince Edward Island. The British population of Nova Scotia was 8,104 in 1762, thirteen years after the foundation of Halifax in 1749.

Our chief sources of statistics for half a century and more after the cession are the reports—more or less sporadic—of colonial governors, though censuses of the different sections under British rule were taken at irregular intervals. British settlement on a substantial scale in the Gulf provinces and in Ontario dates only from the Loyalist movement which followed the American Revolution, at the end of which, *i.e.*, about the year of the Constitutional Act (1791), the population of Lower Canada was approximately 163,000, while the newly constituted province of Upper Canada, under Lieutenant-Governor Simcoe, numbered perhaps 15,000, and the addition of the maritime colonies brought the total to well over 200,000. A decade later Canada began the nineteenth century with a population of probably not less than 250,000 or 260,000. Subsequent censuses gave the populations of the different colonies as follows: Upper Canada (1824) 150,066, (1840) 432,159; Lower Canada (1822) 427,465, (1844) 697,084; New Brunswick (1824) 74,176, (1840) 156,162; Nova Scotia (1817) 81,351, (1838) 202,575; Prince Edward Island (1822) 22,600, (1841) 47,042.*

The policy of irregular census-taking was supposed to have been ended after the union of Upper and Lower Canada by an Act, passed on Sept. 18, 1841, which provided for a census in the year 1842 and every fifth year thereafter, but under this Act only the census of Upper Canada was taken and the following year, on Dec. 9, the Act was amended, the reason being stated as follows: "Whereas the Census of the inhabitants of Lower Canada, for the year one thousand eight hundred and forty-two as required by an Act of this Legislature, . . . hath not been duly taken . . and whereas it is of the greatest importance that such Census should be taken. . . . Be it therefore enacted . . . .". The Census of 1844 of Lower Canada was taken under this Act.

Another Act was passed and given Royal Assent on July 28, 1847, creating a "Board of Registration and Statistics" with instructions "to collect statistics and adopt measures for disseminating or publishing the same" and providing for a census to be taken in the year 1848, to be repeated in 1850 and every fifth year thereafter. Under this Act a census of Upper Canada was taken in 1848.

---

* A résumé of the results of all the censuses taken in Canada between 1666 and 1931 has been published in bulletin form and is included in Vol. I, Census of 1931.

Finally an Act was passed on Aug. 30, 1851, providing for a census to be taken in January, 1852, then in the year 1861 and thereafter every tenth year, and that better provision should be made for taking the census. The first census thereunder was taken in January, 1852, and, as similar censuses were taken by New Brunswick and Nova Scotia, there is a regular measure of population growth in Canada over the past 80 years. The 'fifties saw a very rapid development, especially in Ontario, and the 'sixties showed only less substantial gains. In the years following Confederation there was a spurt, the increase between 1871 and 1881 (which included several lean years towards the end) being 635,553, or 17·23 p.c. In neither of the last two decades of the nineteenth century, however, was this record equalled either absolutely or relatively, the gains in each being under 550,000, or 12 p.c. With the end of the century the population of Canada had reached approximately five and a third millions, or twenty times that of 1800. It has increased by five millions in the past thirty years.

Expansion in the Twentieth Century.—It is within the present century that the most spectacular expansion of the population of Canada has taken place. The outstanding feature was, of course, the opening to settlement of the West. The unorganized territories of British North America had been ceded to the Dominion soon after Confederation, and the West had been tapped and traversed by the Canadian Pacific railway in the 'eighties and 'nineties. But though western population was doubled in each of these decades, it was only with the launching of a large-scale immigration movement after 1900 that western settlement and production became a first-rate economic factor. Simultaneously an almost equally striking development occurred in the industrial centres of Eastern Canada, forming the immediate basis for the move upon the West. At the back, of course, was the heavy inflow of British and other capital—a total of $1,500,000,000 between 1900 and 1912—to finance large constructive undertakings (chiefly railway, municipal, and industrial) which characterized the movement. The years 1901 to 1911, in brief, form the *decas mirabilis* of Canadian expansion. The immigration movement just mentioned, which had previously run well under 50,000 per annum, rose rapidly to over five times that volume, eventually passing 400,000 in a single year. In the ten years between 1901 and 1911 it exceeded 1,800,000 and, though at least a third of these were lost (partly in the return to Europe of labour temporarily attracted by the railway and other developments in progress, and partly in the never-ceasing and natural 'drag' of the United States upon a virile and less wealthy people), it formed the chief factor in the gain of 34 p.c. which the total population of Canada registered in that decade, and which was larger than the relative growth of any other country during the same period. The movement was continued and even intensified in the first three years of the second decade of the century, after which a recession set in, to which the outbreak of war gave a new and wholly unexpected turn. Nevertheless, the decade which closed with the Census of 1921 showed over 1,700,000 immigrant arrivals in Canada, and, though the proportionate loss of these was very heavy (probably as much as two-thirds), Canada's relative gain for the decade was again among the largest in the world.

Results of the Census of 1931.—The total population of the Dominion on June 1, 1931, was 10,376,786, as compared with 8,787,949 on June 1, 1921, an increase of 1,588,837 or 18·08 p.c. in the decade, as compared with 21·94 p.c. and 34·17 p.c. during the decades 1911 to 1921 and 1901 to 1911, respectively.

During the decade 1911-21 the countries which comprise the British Empire, and more especially the United States which was in the Great War for only nineteen months as against Canada's fifty-two, had suffered less in actual loss of life from the War and its consequences than the continental countries of Europe. None of them declined in population during the period, as many continental European countries did. Their percentage increases, however, were in almost all cases lower than in the previous decade. Thus the population of England and Wales increased between 1911 and 1921 only from 36,070,492 to 37,886,699, or 5·0 p.c., as compared with an increase of 10·9 p.c. in the previous decade; Scotland, again, increased only from 4,760,904 to 4,882,497, or 2·6 p.c., as compared with 6·5 p.c. between 1901 and 1911. Nor has this situation been much improved in the post-war decade 1921-31, for the increase in England and Wales during these years was but 5·4 p.c. and Scotland actually showed a decrease of 0·8 p.c. Of the overseas Dominions, New Zealand, according to the official estimate* increased her population from 1,218,913 to 1,452,747, or by about 19 p.c. for the decade ended 1931, as compared with 20·9 p.c. and 30·5 p.c., respectively, for the decades ended 1921 and 1911. In the case of the white population of South Africa, much the same condition obtained. The Commonwealth of Australia, the only Dominion to grow more rapidly in the second decade of the twentieth century than in the first, increased from 4,455,005 in 1911 to 5,435,734 in 1921, or by 22·01 p.c., as compared with 18·05 p.c. for 1901-11, and to 6,552,606 in 1931 according to the official estimate,* or by 20·5 p.c. in the decade 1921-31. The population of the continental United States increased between 1920 and 1930 from 105,710,620 to 122,775,046, an increase of 16·1 p.c. as compared with 14·9 p.c. in the decade 1910-20 and 21 p.c. in the decade 1900-10.

Considering now the movement of population within the Dominion of Canada itself, it is evident from Table **1** that in this country, as formerly in the United States, there has been a distinct movement of population from east to west. In the decade from 1911 to 1921 this was clearly apparent, for the four western provinces then increased their population by no less than 44 p.c. This growth occurred chiefly in the three Prairie Provinces for their combined population increased in the decade by 47·3 p.c., while that of British Columbia increased by 33·6 p.c. In the first two decades of the century the economic factor which had the greatest influence on population growth and movement in Canada was undoubtedly the agricultural settlement of the Prairie Provinces. The growth of population in these provinces was assisted both by immigration into Canada and by movement of domestic population from east to west.

While the agricultural industry of the Prairie Provinces has encountered periods of serious difficulty since the War, major economic developments have been in progress in the mining, forest products, and hydro-electric power industries of Quebec, Ontario, and British Columbia. Furthermore, in this period immigration has been less important as a factor in population growth (see Table **1**, p. 156) than in pre-war years, and thus the high rate of natural increase in Quebec (see Table **33**, p. 151) has become a relatively greater factor. The Census of 1931 revealed the changing trends resulting from these influences, for in this latest decade the population of British Columbia increased 32·3 p.c. and of Quebec 21·7 p.c. compared with 20·3 p.c. for the Prairie Provinces. This change is also indicated by the percentage figures of Table **2**, p. 79. The 1936 Quinquennial Census of the Prairie Provinces showed very little growth of population in those provinces in the 5-year period after 1931.

---

* In both New Zealand and Australia the 1931 censuses were postponed and were taken in March, 1936, and June, 1933, respectively.

Centres of Population.—The 'centre of population'* for the Dominion of Canada was carefully worked out for each census from 1851 to 1931, inclusive, and showed a definite north-westward movement up to 1911, westward for the next decade and northward for 1931. For the censuses of 1851 to 1881 the location was near Valleyfield, Que.; in 1891, it was 25 miles west of Ottawa; in 1901, near Pembroke; in 1911, 45 miles west of Sudbury; in 1921, 50 miles northeast of Sault Ste. Marie; and in 1931, 35 miles north of Sault Ste. Marie.

Density of Population.—The density of population in 1931 (*i.e.*, the number of persons per square mile of the land area as in that year), as compared with 1921, 1911, and 1901, is shown by provinces and for the country as a whole in Table **5**.

---

* The centres of population are the centres of gravity (not the intersections of median lines). The units of area in which the moments (*i.e.*, population multiplied by distance from a fixed point) were calculated, were the permanent counties or census divisions, of which there are about 220, the same units being used so far as possible for all censuses from 1851 to 1931. The geographical centre of the unit area was assumed to be the centre of population of that unit except in the cases of the thinly settled northern areas of counties with very large cities, where special adjustments were made.

5.—Area and Density of Population of Canada, by Provinces, 1901-31.

Province or Territory.	Land Area in Sq. Miles.	Population, 1901.[1]		Population, 1911.[1]		Population, 1921.		Population, 1931.	
		Total.	Per Sq. Mile.	Total.	Per Sq. Mile.	Total	Per Sq. Mile.	Total.	Per Sq. Mile.
P. E. Island	2,184	103,259	47·28	93,728	42·92	88,615	40·57	88,038	40·31
Nova Scotia	20,743	459,574	22·16	492,338	23·74	523,837	25·25	512,846	24·72
New Brunswick	27,473	331,120	12·06	351,889	12·81	387,876	14·12	408,219	14·86
Quebec	523,534	1,648,898	3·15	2,005,776	3·83	2,360,665[2]	4·51	2,874,255	5·49
Ontario	363,282	2,182,947	6·01	2,527,292	6·96	2,933,662	8·08	3,431,683	9·45
Manitoba	219,723	255,211	1·16	461,394	2·10	610,118	2·78	700,139	3·19
Saskatchewan	237,975	91,279	0·38	492,432	2·07	757,510	3·18	921,785	3·87
Alberta	248,800	73,022	0·29	374,295	1·50	588,454	2·37	731,605	2·94
British Columbia	359,279	178,657	0·50	392,480	1·09	524,582	1·46	694,263	1·93
Canada (Exclusive of the Territories)	**2,002,993**	**5,323,967**	**2·66**	**7,191,624**	**3·59**	**8,775,319**[2]	**4·38**	**10,362,833**	**5·18**
Yukon	205,346	27,219	0·13	8,512	0·04	4,157	0·02	4,230	0·02
N.W.T.	1,258,217	20,129[1]	[1]	6,507	0·01	7,988	0·01	9,723	0·01
Canada	**3,466,556**	**5,371,315**	**1·55**	**7,206,643**	**2·08**	**8,787,949**[2]	**2·53**	**10,376,786**	**2·99**

[1] The populations of Ontario, Quebec, Manitoba, and Northwest Territories were adjusted for 1911 according to the provisions of the Boundary Extensions Acts, 1912, but such adjustment was not carried back to 1901 and this accounts for the apparent decrease of population of the Northwest Territories from 1901 to 1911. [2] Populations of Northwest River Arm and Rigolet, on Hamilton inlet, as in 1921, have been deducted from Quebec, as these parts were awarded to Newfoundland by decision of the Judicial Committee of the Privy Council, Mar. 1, 1927. The grand total for Canada also contains 485 members of the Royal Canadian Navy who were recorded separately in 1921.

Figures showing the density of population in 1931, by counties and census divisions, are given in Table 6. Generally speaking, the density of population decreases as one travels westward, but the enormous area of the province of Quebec unduly reduces the density of its population, which was 5·49 in 1931. As among the nine provinces, the density of population is greatest in Prince Edward Island and least in British Columbia.

6.—Area and Density of Population, by Counties or Census Divisions, 1931.

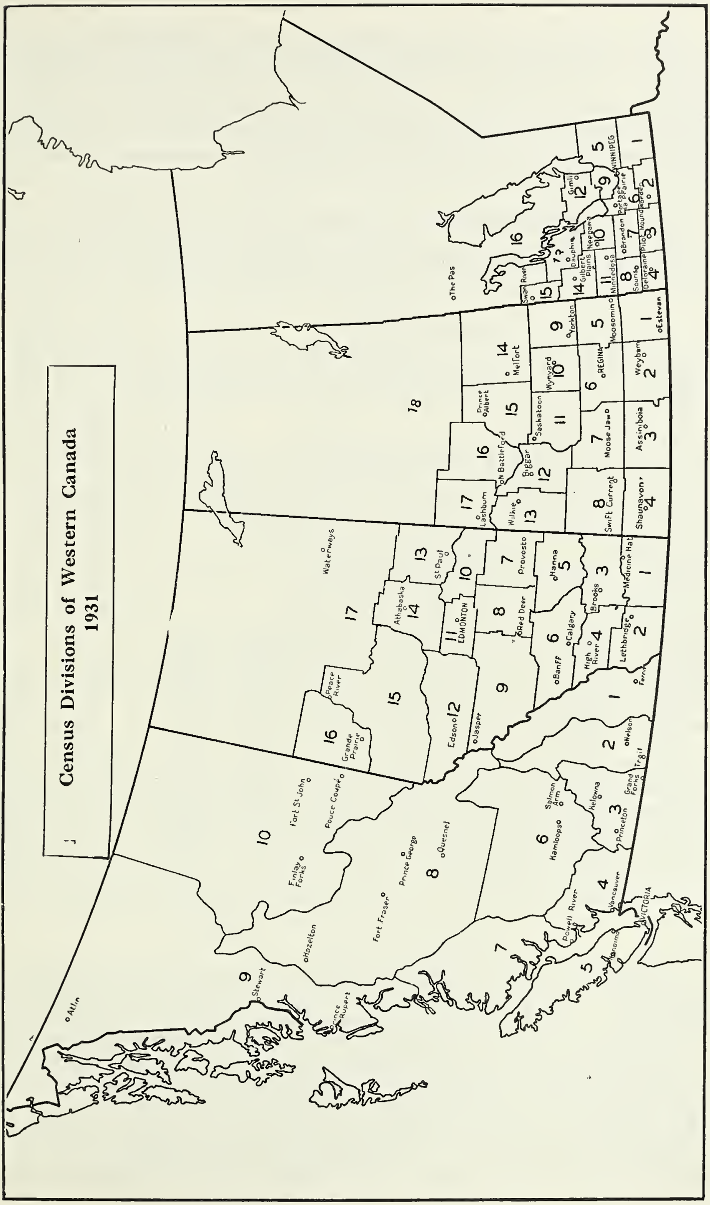
Province and County.	Land Area in Sq. Miles.	Population, 1931.	
		Total.	Per Sq. Mile.
CANADA	**3,466,556**	**10,376,786**	**2·99**
Prince Edward Island	**2,184**	**88,038**	**40·31**
Kings	641	19,147	29·87
Prince	778	31,500	40·49
Queens	765	37,391	48·88
Nova Scotia	**20,743**	**512,846**	**24·72**
Annapolis	1,285	16,297	12·68
Antigonish	541	10,073	18·62
Cape Breton	972	92,419	95·08
Colchester	1,451	25,051	17·26
Cumberland	1,683	36,366	21·61
Digby	970	18,353	18·92
Guysborough	1,611	15,443	9·59
Halifax	2,063	100,204	48·57
Hants	1,229	19,393	15·78
Inverness	1,409	21,055	14·94
Kings	842	24,357	28·93
Lunenburg	1,169	31,674	27·09
Pictou	1,124	39,018	34·71
Queens	983	10,612	10·80
Richmond	489	11,098	22·70
Shelburne	979	12.485	12·75
Victoria	1,105	8,009	7·25
Yarmouth	838	20,939	24·99
New Brunswick[1]	**27,473**	**408,219**	**14·86**
Albert	681	7,679	11·28
Carleton	1,300	20,796	16·00
Charlotte	1,243	21,337	17·17
Gloucester	1,854	41,914	22·61
Kent	1,734	23,478	13·54
Kings	1,374	19,807	14·42
Madawaska	1,262	24,527	19·44
Northumberland	4,671	34,124	7·31
Queens	1,373	11,219	8·17
Restigouche	3,242	29,859	9·21
St. John	611	61,613	100·84
Sunbury	1,079	6,999	6·49
Victoria	2,074	14,907	7·19
Westmorland	1,430	57,506	40·21
York	3,545	32,454	9·15
Quebec	**523,534**	**2,874,255**	**5·49**
Abitibi[2]	76,725	23,692	0·31
Argenteuil	783	18,976	24·23
Arthabaska	666	27,159	40·78
Bagot	346	16,914	48·88
Beauce	1,128	44,793	39·71
Beauharnois	147	25,163	171·18
Bellechasse	653	22,006	33·70
Berthier	1,816	19,506	10·74
Bonaventure	3,464	32,432	9·36
Brome	488	12,433	25·48
Chambly	138	26,801	194·21
Champlain	8,586	59,935	6·98
Quebec–concluded.			
Charlevoix	2,273	22,940	10·09
Châteauguay	265	13,125	49·53
Chicoutimi	17,800	55,724	3·13
Compton	933	21,917	23·49
Deux-Montagnes	279	14,284	51·20
Dorchester	842	27,994	33·25
Drummond	532	26,179	49·21
Frontenac	1,370	25,681	18·75
Gaspe	4,551	45,617	10·02
Hull	2,432	63,870	26·26
Huntingdon	361	12,345	34·20
Iberville	198	9,402	47·48
Joliette	2,506	27,585	11·01
Kamouraska	1,038	23,954	23·08
Labelle	2,392	20,140	8·42
Lac-St-Jean	23,590	50,253	2·13
Laprairie	170	13,491	79·36
L'Assomption	247	15,323	62·04
Lévis	272	35,656	131·09
L'Islet	773	19,404	25·10
Lotbinière	726	23,034	31·73
Maskinongé	2,378	16,039	6·74
Matane	3,496	45,272	12·95
Mégantic	780	35,492	45·50
Missisquoi	375	19,636	52·36
Montcalm	3,894	13,865	3·56
Montmagny	630	20,239	32·13
Montmorency	2,137	16,955	7·93
Montreal and Jesus Islands	294	1,020,018	3,469·45
Montreal Island	*201*	*1,003,868*	*4,994·37*
Jesus Island	*93*	*16,150*	*173·66*
Napierville	149	7,600	51·01
Nicolet	626	28,673	45·80
Papineau	1,581	29,246	18·50
Pontiac	9,560	21,241	2·22
Portneuf	1,440	35,890	24·92
Quebec	2,745	170,915	62·26
Richelieu	221	21,483	97·21
Richmond	544	24,956	45·88
Rimouski	2,089	33,151	15·87
Rouville	243	13,776	56·69
Saguenay[3]	315,176	21,754	0·07
Shefford	567	28,262	49·84
Sherbrooke	238	37,386	157·08
Soulanges	136	9,099	66·90
Stanstead	432	25,118	58·14
St-Hyacinthe	278	25,854	93·00
St-Jean	205	17,649	86·09
St-Maurice	1,820	69,095	37·96
Temiskaming	8,977	20,609	2·30
Témiscouata	1,806	50,294	27·85
Terrebonne	782	38,611	49·37
Vaudreuil	201	12,015	59·78
Verchères	199	12,603	63·33
Wolfe	680	16,911	24·87
Yamaska	365	16,820	46·08

---

[1] The areas of the counties in New Brunswick have been revised since the Census of 1931 [2] Includes districts of Abitibi and Mistassini. [3] Includes district of New Quebec.

6.—Area and Density of Population, by Counties or Census Divisions, 1931—concluded.

Province and County.	Land Area in Sq. Miles.	Population, 1931.	
		Total.	Per Sq. Mile.
Ontario	**363,282**	**3,431,683**	**9·45**
Addington	873	6.879	7·88
Algoma	19,320	46,444	2·40
Brant	421	53,476	127·02
Bruce	1,650	42,286	25·63
Carleton	947	170,040	179·56
Cochrane	52,237	58,033	1·11
Dufferin	557	14,892	26·74
Dundas	384	16,098	41·92
Durham	629	25,782	40·99
Elgin	720	43,436	60·33
Essex	707	159,780	226·00
Frontenac	1,599	45,756	28·62
Glengarry	478	18,666	39·05
Grenville	463	16,327	35·26
Grey	1,708	57,699	33·78
Haldimand	488	21,428	43·91
Haliburton	1,486	5,997	4·04
Halton	363	26,558	73·16
Hastings	2,323	58,846	25·33
Huron	1,295	45,180	34·89
Kenora	18,150	21,946	1·21
Kent	918	62,865	68·48
Lambton	1,124	54,674	48·64
Lanark	1,138	32,856	28·87
Leeds	900	35,157	39·06
Lennox	297	12,004	40·42
Lincoln	332	54,199	163·25
Manitoulin	1,588	10,734	6·76
Middlesex	1,240	118.241	95·36
Muskoka	1,585	20,985	13·24
Nipissing	7,560	41,207	5·45
Norfolk	634	31,359	49·46
Northumberland	734	31,452	42·85
Ontario	853	59,667	69·95
Oxford	765	47,825	62·52
Parry Sound	4,336	25,900	5·97
Peel	469	28,156	60·03
Perth	840	51,392	61·18
Peterborough	1,415	43,958	31·07
Prescott	494	24,596	49·79
Prince Edward	390	16,693	42·80
Rainy River	7,276	17,359	2·39
Renfrew	3,009	52,227	17·36
Russell	407	18,487	45·42
Simcoe	1,663	83,667	50·31
Stormont	412	32,524	78·94
Sudbury	18,058	58,251	3·23
Thunder Bay	52,471	65,118	1·24
Timiskaming	5,896	37,043	6·28
Victoria	1,348	25,844	19·17
Waterloo	516	89,852	174·13
Welland	387	82,731	213·78
Wellington	1,019	58,164	57·08
Wentworth	458	190,019	414·89
York	882	856,955	971·60
District of Patricia	135,070	3,973	0·03
Manitoba	**219,723**	**700,139**	**3·19**
Division No. 1	4,281	22,817	5·33
Division No. 2	2,320	38,810	16·73
Division No. 3	2,577	26,753	10·38
Division No. 4	2,466	18,253	7·40
Division No. 5	5,256	46,228	8·80
Division No. 6	2,436	283,828	116·51
Division No. 7	2,578	36,912	14·32
Manitoba–con.			
Division No. 8	2,160	19,846	9·19
Division No. 9	1,217	45,414	37·32
Division No. 10	2,377	17,916	7·54
Division No. 11	2,914	28,100	9·64
Division No. 12	3,240	24,344	7·51
Division No. 13	3,324	24,263	7·30
Division No. 14	3,636	25,978	7·14
Division No. 15	2,304	10,008	4·34
Division No. 16	176,637	30,669	0·17
Saskatchewan	**237,975**	**921,785**	**3·87**
Division No. 1	5,944	41,544	6·99
Division No. 2	6,686	42,831	6·41
Division No. 3	7,646	46,881	6·13
Division No. 4	7,579	28,126	3·71
Division No. 5	5,760	53,948	9·37
Division No. 6	6,787	109,906	16·19
Division No. 7	7,471	63,230	8·46
Division No. 8	9,264	49,361	5·33
Division No. 9	5,010	60,539	12·08
Division No. 10	4,860	41,890	8·62
Division No. 11	5,979	87,976	14·71
Division No. 12	5,982	40,612	6·79
Division No. 13	6,848	42,632	6·23
Division No. 14	13,419	46,222	3·44
Division No. 15	8,082	83,697	10·36
Division No. 16	8,912	48,736	5·47
Division No. 17	6,913	27,315	3·95
Division No. 18	114,833	6,339	0·06
Alberta	**248,800**	**731,605**	**2·94**
Division No. 1	7,323	28,849	3·94
Division No. 2	6,342	57,186	9·02
Division No. 3	7,018	15,066	2·15
Division No. 4	6,119	29,067	4·75
Division No. 5	7,681	26,651	3·47
Division No. 6	10,595	140,624	13·27
Division No. 7	6,684	38,106	5·70
Division No. 8	6,510	61,016	9·37
Division No. 9	14,415	24,503	1·70
Division No. 10	6,180	58,049	9·39
Division No. 11	4,753	126,832	26·68
Division No. 12	13,083	13,815	1·06
Division No. 13	8,103	24,936	3·08
Division No. 14	8,731	39,508	4·53
Division No. 15	22,845	13,664	0·60
Division No. 16	11,100	27,945	2·52
Division No. 17	101,318	5,788	0·06
British Columbia	**359,279**	**694,263**	**1·93**
Division No. 1	15,984	22,566	1·41
Division No. 2	13,343	40,455	3·03
Division No. 3	10,729	40,523	3·78
Division No. 4	9,764	379,858	38·90
Division No. 5	13,206	120,933	9·16
Division No. 6	31,420	30,025	0·96
Division No. 7	22,187	12,658	0·57
Division No. 8	71,985	21,534	0·30
Division No. 9	88,128	18,698	0·21
Division No. 10	82,533	7,013	0·08
Yukon	**205,346**	**4,230**	**0·02**
Northwest Territories	**1,258,217**	**9,723**	**0·01**


Atlin
9
Stewart
Prince Rupert
Hazelton
Fort Fraser
Finlay Forks
10
Fort St John
Pouce Coupé
Prince George
Quesnel
8
7
Powell River
Nanaimo
5
Vancouver
VICTORIA
4
Kamloops
6
Salmon Arm
Kelowna
Princeton
3
Grand Forks
Trail
Nelson
2
Fernie
1
Jasper
Edson
12
Grande Prairie
16
Peace River
15
Athabaska
14
17
Waterways
11
EDMONTON
St Paul
13
10
8
Red Deer
9
7
Provosto
Banff
6
Calgary
High River
4
Lethbridge
2
Hanna
5
Brooks
3
Medicine Hat
1
Lashburn
17
Wilkie
13
N Battleford
16
Biggar
12
Swift Current
8
Shaunavon
4
Saskatoon
11
Prince Albert
15
Moose Jaw
7
Assiniboia
3
18
Melfort
14
Wynyard
10
REGINA
6
Weyburn
2
Yorkton
9
Moosomin
5
Estevan
1
The Pas
Swan River
15
16
14
Gilbert Plains
Dauphin
7
Neepawa
10
Minnedosa
11
Souris
8
Deloraine
4
Brandon
7
Pilot Mound
3
Portage la Prairie
6
Morden
2
Gimli
12
9
WINNIPEG
5
1

Census Divisions of Western Canada
1931

The densities of population in various countries in recent years are given in Table 7. It should not be assumed, however, that a low density is necessarily evidence of under-population. If density could be expressed in terms of estimated habitable area, the figures would be more comparable, but even then natural physical factors, such as climate, topography, physical condition of the soil, mineral wealth, etc., would not be adequately weighted. These considerations should be borne in mind when comparing the figures of this table.

7.—Densities of Population in Various Countries in Recent Years.

NOTE.—The following figures, for countries other than Canada and China, are based on data taken from the Statistical Year Book of the League of Nations, 1937-38. The population figures of the latest census are used and total population is taken except where indicated otherwise by footnotes.

Country.	Year.	Persons per Sq. Mile.	Country.	Year.	Persons per Sq. Mile.
Belgium	1930	697·59	United States of America (not including Alaska)	1930	40·57
Netherlands	1930	605·80	Sweden	1935	36·06
United Kingdom (including Channel islands and Isle of Man)	1931	490·74	Norway	1930	22·57
Japan	1935	469·50	Russia[2]	1936	21·47
Germany (not including Saar Territory)	1933	360·77	Russia in Europe[2]	1936	*59·80*
Italy	1936	354·61	Union of South Africa	1936	20·32
China proper[1]	1931	234·87	New Zealand	1936	15·20
Poland	1931	214·51	Argentina[2]	1936	11·65
India	1931	195·07	Southern Rhodesia[2]	1936	8·66
British India	1931	*247·67*	**Canada**	**1931**	**2·99**
France	1936	196·97			
Spain (including Canary islands)	1930	121·34	Canada, exclusive of the Territories	1931	*5·18*
Irish Free State	1936	111·33	Commonwealth of Australia	1933	2·23

[1] Estimate as of Dec. 31, 1931, taken from Canada Year Book, 1934-35, p. 168.

[2] Estimate as at Dec. 31, 1936.

Elements of Growth.—The factors involved in estimating population movement and growth are: natural increase, which is a resultant of births and deaths; immigration; and emigration. As explained on p. 115, co-operation in the collection of vital statistics (births, marriages, and deaths) in Canada was a consequence of the establishment of the Dominion Bureau of Statistics in 1918, and vital statistics for all provinces except Quebec were made available on a uniform basis for the first time for the years 1921 to 1925. Quebec has been included in the registration area from Jan. 1, 1926, and, since that time, figures for all provinces have been comparable.

Immigration figures are available from the old records of the Department of Immigration or, since 1936, from the Immigration and Colonization Branch of the Department of Mines and Resources, for a period antedating Confederation by fifteen years (see p. 152). It is very difficult, however, to obtain correct figures for emigration; no record of this movement is kept by the Canadian Government, although its magnitude is indicated by United States, United Kingdom, and other British returns of Canadian immigrants to those countries. Even these figures cannot however, be taken at their face value since no allowance is made for Canadians returning to Canada after a more or less extended period of residence in the United States or British countries outside Canada. Since 1924, however, the Canadian

Government immigration officers have been instructed to take note of such Canadians returning from the United States. This group, of course, covers the greater part of "returning Canadians".

Estimates of Canadian emigration based on United States and British returns, supplemented by the known figures for "returning Canadians" are made by the Social Analysis Branch of the Dominion Bureau of Statistics in the process of working out the annual estimates of population. These estimates are the closest available but are naturally subject to a margin of error because of the incomplete data upon which they are based and the fact that they are calculated for a period of time ahead of actual experience. Moreover, the annual estimates of population are not calendar year statistics but are from June 30 to July 1, respectively, and naturally such emigration estimates as are made are on the same basis.

It will be clear, therefore, that, while the *trend* of emigration can be obtained by the interested reader from the statistics given in Table **8**, he would not be justified in adding together natural increase and immigration for any year and expecting the total, when subtracted from the estimated increase in population, to represent the emigration for that year.

8.—Summary of Births, Deaths, Natural Increase, and Immigration, calendar years, with Estimated Population as at June 1, 1921-38.

Year.	Calendar Year Data.				Data for Year ended June 1.		
	Births.	Deaths.	Natural Increase.	Immigration.	Estimated Population of Previous Year.	Estimated Population.	Estimated Increase in Population.
1921	257,728	101,155	156,573	91,728	8,556,000	8,788,000	232,000
1922	252,571	102,487	150,084	64,224	8,788,000	8,919,000	131,000
1923	240,476	105,330	135,146	133,729	8,919,000	9,010,000	91,000
1924	244,525	98,553	145,972	124,164	9,010,000	9,143,000	133,000
1925	242,388	98,777	143,611	84,907	9,143,000	9,294,000	151,000
1926	232,750	107,454	125,296	135,982	9,294,000	9,451,000	157,000
1927	234,188	105,292	128,896	158,886	9,451,000	9,637,000	186,000
1928	236,757	109,057	127,700	166,783	9,637,000	9,835,000	198,000
1929	235,415	113,515	121,900	164,993	9,835,000	10,029,000	194,000
1930	243,495	109,306	134,189	104,806	10,029,000	10,208,000	179,000
1931	240,473	104,517	135,956	27,530	10,208,000	10,376,000	168,000
1932	235,666	104,377	131,289	20,591	10,376,000	10,506,000	130,000
1933	222,868	101,968	120,900	14,382	10,506,000	10,681,000	175,000
1934	221,303	101,582	119,721	12,476	10,681,000	10,824,000	143,000
1935	221,451	105,567	115,884	11,277	10,824,000	10,935,000	111,000
1936	220,371	107,050	113,321	11,643	10,935,000	11,028,000	93,000
1937	219,988	113,694	106,294	15,101	11,028,000	11,120,000	92,000
1938	-	-	-	-	11,120,000	11,209,000	89,000

Section 2.—Sex Distribution.

Throughout the older countries of the world there is usually found an excess of female over male population, more especially as in most of these countries the census is taken on a *de facto* instead of, as in Canada, on a *de jure* basis. The causes of this excess of female population are: (1) the normally higher rate of mortality among males; (2) the greater number of males who travel; (3) the effects of war; (4) the employment of males in the army, navy and merchant marine; and (5) the preponderance of males among emigrants. In the newer countries of the world, however, the preponderance of males among immigrants results in a general excess of male over female population. These phenomena are exemplified for both the older and the newer countries in Table **10**.

In Canada there has been an excess of male population from the commencement of its history, the first census (1666) showing 2,034 males to only 1,181 females. As the colony increased in numbers, the disproportion between the sexes became smaller, more especially since the French-Canadian population, after about 1680, was not reinforced by immigration from the Old World. In 1784, when the English-speaking immigration to Canada for purposes of settlement was commencing, there were 54,064 males and 50,759 females in the colony. At the middle of the nineteenth century, there were 449,967 males to 440,294 females in Lower Canada, and 499,067 males to 452,937 females in the more newly-settled Upper Canada, and since Confederation the same phenomenon of considerable excess of males has occurred throughout the growing northwest. The great immigration of the first decade of the present century resulted in raising what is called the 'masculinity' of the Canadian population (*i.e.*, the excess of males over females per 100 of population) to the highest point in recent history, *viz.*, 6·07 p.c. in 1911. The Great War, however, both checked immigration and took about 60,000 young Canadian male lives as its toll, with the result that at the Census of 1921 the masculinity of our population was only 3 p.c.—515 males to 485 females per 1,000 of population.

In 1931 there were 518 males to 482 females for Canada as a whole. It is interesting to note that the masculinity of the population has increased in the eastern provinces and decreased in the western ones, where it was formerly greatest. In Table **9** statistics are presented showing the number of males and females in each of the provinces and territories at each census since 1871. A table showing the proportions of the sexes and excess of males per 1,000 of population, 1871-1931, appeared at p. 113 of the 1934-35 Year Book. The statistics of Table **10** show the position of Canada among other countries of the world in regard to masculinity.

9.—Sex Distribution of the People of Canada, by Provinces, 1871-1931.

Province or Territory.	1871.		1881.		1891.	
	Male.	Female.	Male.	Female.	Male.	Female.
Prince Edward Island	47,121	46,900	54,729	54,162	54,881	54,197
Nova Scotia	193,792	194,008	220,538	220,034	227,093	223,303
New Brunswick	145,888	139,706	164,119	157,114	163,739	157,524
Quebec	596,041	595,475	678,175	680,852	744,141	744,394
Ontario	828,590	792,261	978,554	948,368	1,069,487	1,044,834
Manitoba	12,864	12,364	35,123	27,137	84,342	68,164
Saskatchewan	–	–	–	–	–	–
Alberta	–	–	–	–	–	–
British Columbia	20,694	15,553	29,503	19,956	63,003	35,170
Yukon	–	–	–	–	–	–
Northwest Territories	24,274	23,726	28,113	28,333	53,785	45,182
Canada	**1,869,264**	**1,819,993**	**2,188,854**	**2,135,956**	**2,460,471**	**2,372,768**

Province or Territory.	1901.		1911.		1921.		1931.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Prince Edward Island	51,959	51,300	47,069	46,659	44,887	43,728	45,392	42,646
Nova Scotia	233,642	225,932	251,019	241,319	266,472	257,365	263,104	249,742
New Brunswick	168,639	162,481	179,867	172,022	197,351	190,525	208,620	199,599
Quebec	824,454	824,444	1,012,815	992,961	1,179,726	1,180,939	1,447,124	1,427,131
Ontario	1,096,640	1,086,307	1,301,272	1,226,020	1,481,890	1,451,772	1,748,844	1,682,839
Manitoba	138,504	116,707	252,954	208,440	320,567	289,551	368,065	332,074
Saskatchewan	49,431	41,848	291,730	200,702	413,700	343,810	499,935	421,850
Alberta	41,019	32,003	223,792	150,503	324,208	264,246	400,199	331,406
British Columbia	114,160	64,497	251,619	140,861	293,409	231,173	385,219	309,044
Yukon	23,084	4,135	6,508	2,004	2,819	1,338	2,825	1,405
Northwest Territories	10,176	9,953	3,350	3,157	4,129	3,859	5,214	4,509
Canada	**2,751,708**	**2,619,607**	**3,821,995**	**3,384,648**	**4,529,643**[1]	**4,258,306**	**5,374,541**	**5,002,245**

[1] Includes 485 members of the Royal Canadian Navy.

10.—Masculinity of the Populations of Various Countries in Recent Years.

NOTE.—A minus sign denotes a deficiency of males. The figures are calculated from population figures of the latest census in each case, as given by the League of Nations Year Book, 1937-38.

Country.	Year.	Excess of Males over Females in each 100 of Population.	Country.	Year.	Excess of Males over Females in each 100 of Population.
Argentina[1]	1928	6·58	Denmark	1935	−1·57
Canada	**1931**	**3·58**	Italy	1936	−1·82
India	1931	3·06	Finland	1930	−2·06
Irish Free State	1936	2·43	Spain	1930	−2·42
Australia	1933	1·56	Norway	1930	−2·48
New Zealand	1936	1·53	Northern Ireland	1937	−2·73
United States	1930	1·22	Germany	1933	−2·92
Union of South Africa	1936	0·88	Czechoslovakia	1930	−3·00
Bulgaria	1934	0·42	France	1931	−3·40
Japan	1935	0·31	Switzerland	1930	−3·66
Netherlands	1930	−0·64	Austria	1934	−3·90
Greece	1928	−0·84	Scotland	1931	−3·94
Belgium	1930	−0·96	England and Wales	1931	−4·18
Chile	1930	−0·98	Portugal	1930	−4·60
Sweden	1936	−1·14	U.S.S.R. (Europe)	1926	−4·90

[1] 1928 estimate.

Section 3.—Conjugal Condition.

In Table **11** are given, in summary form, the statistics of the conjugal condition of the population, as single, married, widowed, divorced, and legally separated, for 1871 and subsequent censuses. Especially notable is the larger proportion of married in the more recent years. This is mainly attributable to the larger proportion of adults to total population in our own time. Noteworthy also is the larger proportion of divorced and legally separated in later years. A table showing the conjugal condition of the people, as percentages of the total population, was given at p. 110 of the 1936 Year Book. Another table, showing conjugal condition by sex and provinces, will be found at the same place. At pp. 115-116 of the 1934-35 Year Book a table appeared showing the conjugal condition of the 1931 population, 15 years of age or over by age groups. The reader is referred to p. 131 of this volume for details of divorces granted in the years 1918-38.

11.—Conjugal Condition of the Population, as Shown by the Censuses of 1871-1931.

NOTE.—Dashes in this table indicate that no data were reported under the respective headings.

Census Year and Sex.	Single.	Married.	Widowed.	Divorced.	Legally Separated.	Not Given.	Total.
1871[1]—Male	1,183,787	543,037	37,487	–	–	–	1,764,311
Female	1,099,216	542,339	79,895	–	–	–	1,721,450
1881—Male	1,447,415	690,544	50,895	–	–	–	2,188,854
Female	1,336,981	689,540	109,435	–	–	–	2,135,956
1891—Male	1,601,541	796,153	62,777	–	–	–	2,460,471
Female	1,451,851	791,902	129,015	–	–	–	2,372,768
1901—Male	1,748,582	928,952	73,837	337	–	–	2,751,708
Female	1,564,011	904,091	151,181	324	–	–	2,619,607
1911—Male	2,369,766	1,331,853	89,154	839	1,286	29,097	3,821,995
Female	1,941,886	1,251,468	179,656	691	1,584	9,363	3,384,648
1921—Male	2,698,564	1,698,297	119,695	3,670	[2]	9,417	4,529,643
Female	2,378,728	1,631,663	236,504	3,731	[2]	7,680	4,258,306
1931—Male	3,179,444	2,033,240	148,954	4,049	[3]	8,854	5,374,541
Female	2,771,968	1,937,950	288,641	3,392	[3]	294	5,002,245

[1] The figures for 1871 cover the four original provinces of Canada only. [2] Legally separated included with divorced. [3] Legally separated included with married.

Section 4.—Age Distribution.

The same causes which have in the past rendered the sex distribution of population in Canada somewhat unusual have also affected its age distribution. In the first stages of the settlement of a new colony, men in the prime of life constitute the bulk of the population, and women and children are conspicuous by their absence, so that there will be a disproportionately large male population between the ages of 20 and 50, together with a low birth rate. Later on in the settlement of a new country, where there is land and food for all and where the early disproportion of the sexes has been overcome, there is a very high rate of natural increase, and an extraordinarily large proportion of children among the population. Thus in 1871 (see Table **12**), 286·91 out of every 1,000 of the population of Canada were children under 10 years of age, and over half the total population (526·76 out of every 1,000) were under 20 years of age. But, with the growing urbanization of population, the average age at marriage increased and children came to be regarded as a liability rather than an asset. Thus in 1911, out of every 1,000 of the population, only 231·83 were under 10 years of age and 423·42 under 20 years of age. In 1921, however, 239·67 per 1,000 of the population were under 10 years of age and 434·81 per 1,000 under 20 years. In 1931, the number of children under 10 years of age had dropped to 212·70 per 1,000 of the population, and of persons under 20 to 416·39 per 1,000.

Table **13** shows the varying age distribution of the population of the respective provinces. At p. 118 of the 1934-35 Year Book details of the age distribution of the population of the Dominion, by sex, for the census years 1881 to 1931 were given.

12.—Proportion per 1,000 of the Population by Age Periods, Census Years, 1871-1931.

Age Period.	1871.	1881.	1891.	1901.	1911.	1921.	1931.
Under 1 year	30·567	28·019	24·923	24·497	25·734	23·858	19·531
1— 4 years	115·649	108·507	99·964	95·210	97·413	96·482	84·009
5— 9 "	140·691	128·251	121·242	114·664	108·685	119·333	109·162
10—19 "	239·854	227·404	219·710	210·906	191·585	195·138	203·689
20—29 "	171·436	175·957	178·080	173·549	189·335	159·041	163·583
30—39 "	111·404	113·099	122·080	129·259	141·938	146·247	134·656
40—49 "	79·995	83·817	88·441	98·494	100·071	109·481	118·660
50—59 "	54·788	58·087	62·360	67·886	69·121	73·082	82·463
60 or over	55·128	63·270	70·142	76·397	71·027	74·917	83·882
Not given	0·488	13·589	13·059	9·137	5·090	2·419	0·363

13.—Proportion per 1,000 of the Population by Age Periods, by Provinces, 1931, with Totals for 1921.

Province.	0-9 Years.	10-19 Years.	20-44 Years.	45-69 Years.	70 Years or Over.	Age Not Given.
Prince Edward Island	212·47	207·97	308·15	206·52	64·81	0·08
Nova Scotia	215·36	214·17	320·93	198·39	50·93	0·22
New Brunswick	239·83	219·63	317·25	181·18	41·95	0·17
Quebec	245·89	214·20	352·95	157·69	29·05	0·23
Ontario	186·68	185·67	373·92	212·28	41·20	0·25
Manitoba	203·29	219·27	365·99	185·52	25·72	0·20
Saskatchewan	234·80	228·98	353·08	163·81	19·12	0·21
Alberta	217·98	210·00	374·07	178·47	19·32	0·16
British Columbia	160·07	175·97	377·16	254·66	29·97	2·17
Canada, 1931[1]	**212·70**	**203·69**	**360·50**	**189·52**	**33·22**	**0·36**
Canada, 1921[1]	**239·67**	**195·14**	**365·27**	**169·38**	**28·12**	**2·42**

[1] The statistics for Yukon and the Northwest Territories are included in the totals.

Age Distribution by Sex.—An interesting table of quartile and decile age distribution, by sex, with textual interpretation, was given at pp. 119-120 of the 1934-35 Year Book. It is not repeated in order to conserve space.

Section 5.—Racial Origins.

In six out of seven censuses of Canada since Confederation the racial origin of each person has been secured, the exception being 1891. The object of this information is to ascertain from what basic ethnic stocks the Canadian population, more particularly the recently immigrated population, is derived. The answer "Canadian" is not accepted under this heading, as the purpose of the question is to obtain, in so far as possible, a definition of "Canadian" in terms of racial derivation. Of this procedure of the census, criticism has been received on two main grounds: (*a*) that there are Canadians whose family is of several generations residence in the country who may not know their ultimate racial origin, or who may be of very mixed racial origin; (*b*) that the practice tends to perpetuate racial distinctions which it is desirable to obliterate. As against these criticisms the following three points must be considered: (*a*) that the Canadian whose family is of three or more generations residence is enumerated and differentiated through the census question on the birthplace of parents for which statistics from the 1931 Census appeared at pp. 134-139 of the 1934-35 Year Book; (*b*) that notwithstanding the desirability of racial assimilation, there are special features in connection with the process that require appraisement and study—for example, 271 children of Chinese fathers and 842 of Japanese fathers were born in Canada in 1931. Again, the fact that the constitution of Canada is based on the presence of two dominant races points to the desirability of a measurement of these factors: only recently it has been widely pointed out that the original French colony, numbering 70,000 at the date of the Conquest, has expanded to over three millions to-day. Measurements of this kind would be impossible if the answer "Canadian" instead of "French" were accepted under the heading of racial origin, yet undoubtedly if the descendants of the original French colonists are not "Canadians", no one is; (*c*) finally, racial origin is an important subject for study in a new country like Canada from a scientific standpoint, *i.e.*, from the standpoint of the student of ethnology, criminology, and the social and "biometric" sciences in general.

To accept the answer "Canadian" to the question on racial origin would confuse the data and defeat the purpose for which the question is asked.

Racial Distribution.—The total increase in population over the decade 1921-31 was 1,588,837. The population of English origin increased by only 196,061 compared with 722,208 in the previous decade; that of Scottish origin by 172,725 compared with 175,745; and that of Irish origin by 123,005 compared with 57,419. The population of British origin, taken together, increased from 4,868,738 to 5,381,071, or by 512,333, between 1921 and 1931. This represented 32 p.c. of the total increase as compared with 61 p.c. of the total increase for the previous decade. On the other hand, the population of French origin increased from 2,452,743 in 1921 to 2,927,990 in 1931, or by 475,247 (slightly under 30 p.c. of the total increase for the decade) and showed the greatest absolute increase for any decade since 1871. Figures for the minor racial groups that help to compose the nation (see Table **14**) indicate that the people of Scandinavian, German, and Ukrainian origins increased between 1921 and 1931 by 36 p.c., 61 p.c., and 111 p.c., respectively. Owing to the new national and racial alignments in Central and Southeastern Europe following the Great War, comparison of the post-war numerical strength of certain ethnic stocks in Canada with pre-war returns cannot be made with any certainty. For example, a number of people reported as of Ukrainian stock in the Seventh Census were described in the Censuses of 1921 and 1911 as Galician, Bukovinian, Ruthenian, or Russian.

A perspective of the percentage relationship of the origin groups to the population as a whole was given in tabular form for the censuses 1871 to 1931 at p. 123 of the 1934-35 Year Book. Table **14,** below, gives the actual figures for the same years.

Together, the British and French groups constituted, in 1931, 80 p.c. of the total population, compared with 83 p.c. in 1921 and 1911, 88 p.c. in 1901, 89 p.c. in 1881 and no less than 92 p.c. in 1871. The immigration of continental Europeans to Canada during the past thirty years has, of course, been the cause of this decline.

14.—Origins of the People, Census Years, 1871-1931.

NOTE.—Origins were not taken in the Census of 1891. See also headnote to Table **11.**

Origin.	1871.[1]	1881.	1901.	1911.[2]	1921.	1931.
British—						
English	706,369	881,301	1,260,899	1,871,268	2,545,358	2,741,419
Irish	846,414	957,403	988,721	1,074,738	1,107,803	1,230,808
Scottish	549,946	699,863	800,154	1,027,015	1,173,625	1,346,350
Other	7,773	9,947	13,421	26,060	41,952	62,494
Totals, British	2,110,502	2,548,514	3,063,195	3,999,081	4,868,738	5,381,071
French	1,082,940	1,298,929	1,649,371	2,061,719	2,452,743	2,927,990
Austrian, *n.o.p.*	–	–	10,947	44,036	107,671	48,639
Belgian	–	–	2,994	9,664	20,234	27,585
Bulgarian and Roumanian	–	–	354	5,883	15,235	32,216
Chinese	–	4,383	17,312	27,831	39,587	46,519
Czech (Bohemian and Moravian)	–	–	–	–	8,840	30,401
Dutch	29,662	30,412	33,845	55,961	117,505	148,962
Finnish	–	–	2,502	15,500	21,494	43,885
German	202,991	254,319	310,501	403,417	294,635	473,544
Greek	–	–	291	3.614	5,740	9,444
Hebrew	125	667	16,131	76,199	126,196	156,726
Hungarian	–	–	1,549	11,648	13,181	40,582
Indian and Eskimo[3]	23,037	108,547	127,941	105,611	113,724	128,890
Italian	1,035	1,849	10,834	45,963	66,769	98,173
Japanese	–	–	4,738	9,067	15,868	23,342
Negro	21,496	21,394	17,437	16,994	18,291	19,456
Polish	–	–	6,285	33,652	53,403	145,503
Russian	607	1,227	19,825	44,376	100,064	88,148
Scandinavian[4]	1,623	5,223	31,042	112,682	167,359	228,049
Ukrainian	–	–	5,682	75,432	106,721	225,113
Yugoslavic	–	–	–	–	3.906	16,174
Various	4,182	8,540	7,000	31,381	28,796	27,476
Unspecified	7,561	40,806	31,539	16,932	21,249	8,898
Grand Totals	**3,485,761**	**4,324,810**	**5,371,315**	**7,206,643**	**8,787,949**	**10,376,786**

[1] The figures for 1871 cover the four original provinces of Canada only. [2] Figures for individual origins revised by the redistribution of 130,413 "Unspecified" since the publication of the 1938 Year Book. [3] Incomplete in 1871; includes "half-breeds" in 1901. [4] Includes Danish, Icelandic, Norwegian, and Swedish; in 1921 they numbered, respectively, 21,124, 15,876, 68,856, and 61,503; in 1931, 34,118, 19,382, 93,243, and 81,306.

Section 6.—Religions.

At each of the censuses from 1871 to 1931 every inhabitant of Canada has been asked to state the religious body of which he is a member or an adherent. During the sixty-year period there have been various fluctuations in the proportions of the population belonging to the leading religious bodies, and these fluctuations are, in a new country like this, largely occasioned by the religious affiliations of immigrants.

Throughout the sixty-year period something like two-fifths of the population of Canada has been of the Roman Catholic faith, the 1931 percentage, inclusive of Greek Catholics, being 41·30. Methodists were 16·27 p.c. of the population in 1871 but fell to 13·19 p.c. in 1921, while Presbyterians increased from 15·63 p.c. in 1871 to 16·04 p.c. in 1921, being reinforced by a considerable immigration from Scotland after the beginning of the century. The fusion of the Methodists and Congregationalists in 1925 with a large section of the Presbyterians, as the United Church of Canada, left that body the second largest religious body in the Dominion in 1931 with 19·44 p.c. of the population. The Presbyterians who did not adhere to the United Church of Canada amounted to 8·39 p.c. of the population in 1931. The proportion of Anglicans in the population of Canada fell from 14·17 p.c. in 1871 to 12·69 p.c. in 1901 but thereafter the large immigration from the British Isles raised it to 16·02 p.c. in 1921, followed by a slight falling-off to 15·76 p.c. in 1931. The Baptists have shown a fairly steady decline from 6·87 p.c. in 1871 to 4·27 p.c. in 1931.

The immigration from non-English-speaking countries during the first three decades of the twentieth century led to a great growth of the religious bodies which have as their home the continent of Europe. Thus the Lutherans, who were only 1·09 p.c. of the population in 1871 and 1·72 p.c. in 1901, rose to 3·80 p.c. in 1931. The Jews, again, who were only 0·03 p.c. in 1871 and 0·31 p.c. in 1901, were 1·50 p.c. in 1931. The adherents of the Greek Orthodox Church, who in earlier years were not distinguished from Greek Catholics (the two together being only 0·29 p.c. in 1901) were 0·99 p.c. in 1931.

Of the total population in 1931 (10,376,786), 16,042 or 0·15 p.c. did not state their religion while 54,164 persons, or 0·52 p.c., belonging to small sects, were classed as "various" and 21,071 or 0·20 p.c. as of "no religion". Of the non-Christian sects, 155,614 or 1·50 p.c. were Jews, 24,087 or 0·23 p.c. were Confucians, 15,784 or 0·15 p.c. were Buddhists, and 5,008 or 0·05 p.c. were pagans. In Table **15** the totals for each religion are brought together for all censuses since Confederation. Further analyses showing the percentages of specified religions at each census, 1871-1931, and the numbers accredited to each specified religion, by provinces, were given at pp. 127-129 of the 1934-35 Year Book.

15.—Religions of the People at each Decennial Census, 1871-1931.

Note.—See headnote to Table **11** .

Religion.	1871[1]	1881.	1891.	1901.	1911.	1921.	1931.
Adventist	6,179	7,211	6,354	8,058	10,406	14,179	16,026
Anglican	494,049	574.818	646,059	681,494	1,043,017	1,407,780	1,635,615
Baptist[2]	239,343[3]	296,525[3]	303,839[3]	318,005	382,720	421,730	443,341
Brethren	2,305	8,831	11,637	8,014	9,278	11,580	13,472
Buddhist	–	–	–	10,407	10,012	11,281	15,784
Christian	–	–	–	7,484	17,421	17,142	11,527
Christian Science	–	–	–	2,619	5,073	13,826	18,436
Church of Christ, Disciples	–	20,193	12,763	17,164	14,554	13,107	15,811
Confucian	–	–	–	5,115	14,562	27,114	24,087
Congregationalist	21,829	26,900	28,157	28,293	34,054	30,730	694[4]
Doukhobor	–	–	–	8,775	10,493	12,648	14,913
Evangelical Association	–	–	–	10,193	10,595	13,905	22,213
Friends (Quaker)	7,345	6,553	4,650	4,100	4,027	3,149	2,424
Greek Church	–	–	–	15,630	88,507	169,832	[5]
Greek Orthodox	–	–	–	–	–	–	102,389[5]
Holiness Movement	–	–	–	2,775	3,856	3,245	4,436
International Bible Students	–	–	–	99	925	6,678	13,552
Jewish	1,115	2,393	6,414	16,401	74,564	125,197	155,614
Lutheran	37,935	46,350	63,982	92,524	229,864	286,458	394,194
Mennonite (incl. Hutterite)	[3]	[3]	[3]	31,797	44,625	58,797	88,736
Methodist	567,091	742,981	847,765	916,886	1,079,993	1,159,246	[4]
Mormon	–	–	–	6,891	15,971	19,622	22,005
No religion	5,146	2,634	[6]	4,810	26,027	21,739	21,071
Pagan	1,886	4,478	[6]	15,107	11,840	6,778	5,008
Pentecostal	–	–	–	–	513	7,003	26,301
Plymouth Brethren	–	–	–	3,040	3,438	6,482	6,983
Presbyterian	544,998	676,165	755,326	842,531	1,116,071	1,409,406	870,728[4]

For footnotes, see end of table, p. 96.

15.—Religions of the People at each Decennial Census, 1871-1931—concluded.

Religion.	1871.[1]	1881.	1891.	1901.	1911.	1921.	1931.
Protestant	10,146	6,519	12,253	11,612	30,265	30,753	23,296
Roman Catholic	1,492,029	1,791,982	1,992,017	2,229,600	2,833,041	3,389,626	4,285,388[7]
Salvation Army	–	–	13,949	10,308	18,834	24,733	30,716
Unitarian	2,275	2,126	1,777	1,934	3,224	4,926	4,445
United Church	–	–	–	–	–	8,728[4]	2,017,375[4]
All other (various)	35,035	21,382	46,030	16,427	26,383	31,270	54,164
Not given	17,055	86,769	80,267	43,222	32,490	19,259	16,042
Totals	**3,485,761**	**4,324,810**	**4,833,239**	**5,371,315**	**7,206,643**	**8,787,949**	**10,376,786**

[1] The figures for 1871 cover the four original provinces of Canada only. [2] Including Tunkers. [3] Mennonites were included with Baptists prior to 1901. [4] Practically all Methodists and Congregationalists and a large number of Presbyterians united to form the United Church of Canada in 1925, although a relatively small number reported themselves as "United Church" in 1921, chiefly in Western Canada where the movement towards union began. [5] In earlier censuses only small numbers were involved, and Greek Catholics and Greek Orthodox were included under the general term "Greek Church". A rapid increase of both Greek Catholics and Greek Orthodox has been shown for recent censuses and, since the former owe obedience to the Pope in matters of faith, they have been included with the Roman Catholics for 1931. [6] Included with "All other" religions for 1891. [7] Including 186,654 Greek Catholics (see footnote 5).

In 1931, for the first time in the history of the Dominion Census, the religions of the people were cross-classified according to racial origin. The results, for Canada as a whole, were shown at pp. 116-117 of the 1936 Year Book.

Section 7.—Birthplaces.

The birthplaces of the population of Canada, as at each of the seven censuses, are shown by Canadian born, other British born, and foreign born (United States born and other foreign born), in Table **16**. The table shows that, in 1871, 97·28 p.c. of the population was born under the British flag, while sixty years later the percentage had declined to 89·18. The proportion of Canadian born increased steadily until the opening of the century, but has declined as a result of the increase of immigration after 1900. The Census of 1931 showed declines in the proportions of other British born and United States born as compared with 1921 but an increase in the percentage of other foreign born; the proportion of Canadian born has remained practically unchanged.

Worthy of note is the fairly steady increase of population born in the United States from 1·85 p.c. in 1871 to 4·25 p.c. in 1921, and the subsequent decline to 3·32 p.c. in 1931. Other foreign born increased from 0·87 p.c. in 1871 to 6·23 p.c. in 1911, declined to 5·87 p.c. of the total population by 1921 but, as already noted, increased substantially to 7·50 p.c. by 1931.

16.—Birthplaces of the Population of Canada, by Numbers and Percentages, According to the Censuses of 1871-1931.

Year.	Canadian Born.	Other British Born.[1]	Foreign Born.		Total Population.	Percentages of Total Population.			
			Born in United States.	Born in other Foreign Countries.		Canadian Born.	Other British Born.	Foreign Born.	
								Born in United States.	Other Foreign Born.
	No.	No.	No.	No.	No.	p.c.	p.c.	p.c.	p.c.
1871	2,894,591	496,502	64,447	30,221	3,485,761	83·04	14·24	1·85	0·87
1881	3,721,826	478,615	77,753	46,616	4,324,810	86·06	11·07	1·80	1·08
1891	4,189,368	490,573	80,915	72,383	4,833,239	86·68	10·15	1·67	1·50
1901	4,671,815	421,051	127,899	150,550	5,371,315	86·98	7·84	2·38	2·80
1911	5,619,682	834,229	303,680	449,052	7,206,643	77·98	11·58	4·21	6·23
1921	6,832,224	1,065,448	374,022	516,255	8,787,949	77·75	12·13	4·25	5·87
1931	8,069,261	1,184,830	344,574	778,121	10,376,786	77·76	11·42	3·32	7·50

[1] Includes some hundreds of persons born at sea.

The birthplaces of the 1931 population were tabulated for the various provinces and territories, by sex, at p. 118 of the 1936 Year Book. In the Maritime Provinces, the population is shown by the Census of 1931 to be about 93 p.c. native born, and in Quebec about 91 p.c. In Ontario, however, the proportion sinks to about 77 p.c., in Manitoba to about 66 p.c., in Saskatchewan to about 65 p.c., in Alberta to about 58 p.c., and in British Columbia to about 54 p.c.

At pp. 133-140, inclusive, of the 1934-35 Year Book, a very complete analysis was given of the birthplaces of the Canadian people. Tables there published showed: population classified by province of residence and province of birth; population, for each province, classified by nativity of parents; Canadian born classified according to nativity of parents, by racial origin; and rural and urban population, other than Canadian born, classified according to year of arrival in Canada.

Section 8.—Citizenship and Naturalization.

At the latest four decennial censuses, those of 1901, 1911, 1921, and 1931, inquiry has been made into the citizenship of the foreign-born population. The relevant instructions given to enumerators at the Census of 1931 were published at p. 141 of the 1934-35 Year Book.

Table **17** deals with the citizenship of the Canadian born, the British born, and the foreign born of the population residing in Canada at the date of the Census of 1931. As regards the total (8,069,261) native-born population, 8,052,459 were "Canadian Nationals" and were made up of 8,051,142 persons with uninterrupted citizenship and 1,317 naturalized repatriates. Of the total native born resident in Canada at the date of the census, 16,802 were aliens owing their allegiance to some foreign country—in the case of females usually as a result of marriage. The table on p. 142 of the 1934-35 Year Book showed the country to which allegiance was owed by these 16,802 Canadian-born aliens.

In the case of British born, 11·4 p.c. had not yet acquired Canadian domicile and of the foreign born 45·2 p.c. were still aliens. A more detailed analysis than that given below will be found at p. 143 of the 1934-35 Year Book.

17.—Citizenship of Native-Born, Other British-Born, and Foreign-Born Residents in Canada in 1931, by Sex, According to Allegiance.

Nationality.	NATIVE BORN.		
	Total.	Male.	Female.
Canadian-born nationals—Totals	8,052,459	4,074,715	3,977,744
With uninterrupted citizenship	*8,051,142*	*4,074,053*	*3,977,089*
Repatriated and naturalized	*1,317*	*662*	*655*
Canadian-born aliens (by renunciation or marriage)	16,802	1,286	15,516
Owing allegiance to:— European countries[1]	*5,991*	*92*	*5,899*
Asiatic countries	*286*	*20*	*266*
United States	*10,477*	*1,170*	*9,307*
Other countries	*48*	*4*	*44*
Totals, Canadian Born	**8,069,261**	**4,076,001**	**3,993,260**

Nationality.	OTHER BRITISH BORN.		
	Total.	Male.	Female.
British-born Canadian nationals	1,044,791	556,043	488,748
By domicile	*1,042,781*	*555,062*	*487,719*
By repatriation and naturalization	*2,010*	*981*	*1,029*
British born without acquired domicile	135,426	74,687	60,739
British-born aliens (by renunciation or marriage)	4,613	681	3,932
Owing allegiance to:— European countries[1]	*1,625*	*154*	*1,471*
Asiatic countries	*32*	*6*	*26*
United States	*2,914*	*506*	*2,408*
Other countries	*42*	*15*	*27*
Totals, Other British Born	**1,184,830**	**631,411**	**553,419**

[1] The European country of allegiance was given on p. 142 of the 1934-35 Year Book.

17.—Citizenship of Native-Born, Other British-Born, and Foreign-Born Residents in Canada in 1931, by Sex, According to Allegiance—concluded.

Nationality.	FOREIGN BORN.									
	Total.[1]	Continental European Born.			Born in Asia.			United States Born.		
		Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.
Canadian nationals.	614,971	351,013	197,043	153,970	12,119	7,826	4,293	249,595	118,104	131,491
Aliens..............	507,724	363,449	241,140	122,309	48,489	44,349	4,140	94,979	57,036	37,943
European[2]........	*363,754*	*358,198*	*238,366*	*119,832*	*330*	*179*	*151*	*4,822*	*1,991*	*2,831*
Asiatic...........	*48,072*	*63*	*18*	*45*	*47,935*	*44,047*	*3,888*	*64*	*27*	*37*
United States....	*94,984*	*4,726*	*2,447*	*2,279*	*102*	*53*	*49*	*90,069*	*55,009*	*35,060*
Other............	*914*	*462*	*309*	*153*	*122*	*70*	*52*	*24*	*9*	*15*
Totals, Foreign Born....	**1,122,695**	**714,462**	**438,183**	**276,279**	**60,608**	**52,175**	**8,433**	**344,574**	**175,140**	**169,434**

[1] This column includes foreign-born persons born in places other than continental Europe, Asia, or the United States.

[2] The European country of allegiance was given at p. 143 of the 1934-35 Year Book.

The Progress of Naturalization.—The foreign-born residents of Canada numbered 1,122,695 in 1931 as compared with 890,277 in 1921, 752,732 in 1911, and 278,449 in 1901; among these the naturalized numbered 614,971 in 1931, 514,179 in 1921, 344,557 in 1911, and 153,908 in 1901, or 54·78 p.c., 57·75 p.c., 45·77 p.c., and 55·27 p.c., respectively. Alien residents in Canada showed an absolute decline between 1911 and 1921 of from 408,175 to 376,098, *i.e.*, from 5·66 p.c. of the population to 4·28 p.c. Between 1921 and 1931, they increased to 507,724, or 4·89 p.c. of the 1931 population. Among the foreign-born residents of Canada, the United States born exceeded those born in any other country, although by continental groups the Europeans were more numerous. Between 1921 and 1931 the U.S. born declined from 374,022 to 344,574, but there was a substantial net increase in the total foreign born due to the large increase of Europeans. On the other hand, the percentage of the U.S. born who were naturalized to total U.S. born increased from 63·63 in 1921 to 72·44 in 1931, whereas the percentage of continental Europeans who were naturalized fell from 57·88 in 1921 to 49·13 in 1931.

Section 9.—Language Spoken and Mother Tongue.

Official Languages.—In the Census of 1931, 1,322,370 persons were reported as speaking both the official languages of Canada, 6,999,913 speaking English, 1,779,338 speaking French and 275,165 as unable to speak either English or French. In a table on p. 121 of the 1936 Year Book the population was classified by racial origins and as able to speak one, both, or neither of the official languages.

Rural and Urban Distribution.—One interesting sidelight which analysis of the data from the 1931 Census has shown is the respective capacities of rural and urban people to speak the official languages; it is especially interesting to compare the proportions of them who are able to speak both languages and also the proportions unable to speak either. About twice as many speak both French and English in urban localities as in rural localities, and about three times as many of the latter as the former speak neither of these languages. There is, of course, greater opportunity for intermingling in urban residence than rural, and probably also greater necessity for acquiring the official languages in urban occupations. The obvious conclusion or expectation would be that larger proportions among the urban populations than among the rural have *acquired* both official languages. But other factors enter into the question, since the acquisition of both official languages is as much a matter of capacity to acquire them as of opportunity, intermarriage, necessity, and so on.

Table **18** compares the percentages of the rural and urban population of Canada speaking both official languages and speaking neither of them, classified by sex and age in 1931.

18.—Percentages of the Population Speaking Both and Neither Official Languages, by Quinquennial Age Groups, Sex, Rural and Urban, Canada, 1931.

Age Group.	Percentage Speaking both French and English.				Percentage Speaking neither Language.			
	Males.		Females.		Males.		Females.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
5– 9	4·78	7·69	4·87	7·62	4·28	0·53	4·30	0·52
10–14	7·49	14·72	7·67	14·39	1·07	0·09	1·00	0·06
15–19	10·10	21·96	10·40	19·83	1·00	0·16	1·26	0·26
20–24	12·24	25·58	11·15	20·57	1·71	0·59	2·77	1·05
25–29	12·32	25·23	10·24	19·95	2·92	1·98	4·56	1·63
30–34	12·67	24·77	9·58	18·55	3·15	2·02	4·44	1·43
35–39	12·77	23·63	9·23	16·74	2·36	1·72	4·46	1·11
40–44	12·18	21·14	8·76	15·60	2·14	1·86	4·29	0·93
45–49	11·92	19·42	8·65	14·35	2·09	1·83	4·51	0·91
50–54	11·98	19·20	8·10	13·69	2·32	1·60	4·68	0·84
55–59	12·89	19·63	8·48	13·63	2·43	1·52	4·74	0·92
60–64	12·15	18·75	7·59	12·11	3·08	1·37	5·33	1·13
65–69	12·10	18·59	7·13	11·52	3·35	1·08	5·76	1·24
70–74	11·67	17·27	6·74	10·20	3·89	1·08	6·24	1·29
75–79	11·62	16·31	6·31	9·86	4·00	1·11	5·15	1·30
80–84	11·66	15·32	5·81	9·70	4·12	0·96	5·82	1·04
85–89	11·67	14·89	5·93	8·25	4·34	1·23	5·83	1·24
90–94	13·93	15·72	6·40	9·21	5·20	1·28	8·91	1·52
95–99	14·68	21·21	5·26	10·51	7·54	1·82	13·95	1·81
100 or over	12·24	16·00	8·62	12·90	30·61	8·00	27·59	12·90
Not stated	6·29	8·81	4·61	14·04	16·33	1·28	19·51	0·72

Mother Tongue.—At p. 122 of the 1936 Year Book will be found a table showing the mother tongue of the population, by provinces and for the Dominion.

Section 10.—Rural and Urban Population.

For the purposes of the census the population residing in cities, towns, and incorporated villages has been defined as urban, and that outside of such localities as rural. Thus the distinction here made between 'rural' and 'urban' population is a distinction of provincial legal status rather than of size of aggregations of population within limited areas. Since the laws of the various provinces differ in regard to the population necessary before a municipality may be incorporated as urban (the laws of Saskatchewan, for example, making provision that 50 people actually resident on an area not greater than 640 acres may claim incorporation as a village, while the Ontario law now requires that villages asking for incorporation shall have a population of 750 on an area not exceeding 500 acres), the line of demarcation between rural and urban population is not at all uniformly drawn throughout the Dominion, as far as comparable aggregations of population are concerned.

A table published at p. 147 of the 1934-35 Year Book gives the rural and urban populations, by provinces and sex, and divides the incorporated urban centres into two groups, *viz.*, under one thousand, and one thousand or over, thereby allowing a closer comparison than is possible from Table **19**. The population in urban places having less than one thousand was shown to have decreased for the whole of Canada but increased in Prince Edward Island, Nova Scotia, and British Columbia. In Table **19** are given statistics showing the growth of rural and urban population, respectively, by provinces, since 1891. To a limited extent Table **20** will permit the student of population statistics to make, at least for Canada as a whole, his own line of demarcation between rural and urban populations.*

While a summary comparison between urbanization in Canada in 1931 and in the United States in 1930 would lead us to the conclusion that Canada, though far less densely peopled than the United States, had an almost equally large percentage of its population in urban communities, *viz.*, 53·70 p.c. in Canada as compared with 56·2 p.c. in the United States, the fact that in the United States, inhabitants of places having under 2,500 population are included with rural population must be taken into account. A fairer basis of comparison is secured if the same population limits are taken for both countries, as may be done by using Table **20.** Thus, at the Census of 1930, the United States had 29·5 p.c. of its population resident in cities of 100,000 or over, while Canada in 1931 had only 22·44 p.c. of its population in such places. The United States had an additional 18 p.c. of its population residing in cities of between 10,000 and 100,000 population, and 4·8 p.c. in cities and towns of 5,000 to 10,000, while Canada had in cities of these categories only 14·87 p.c. and 4·42 p.c., respectively, of its population. Thus, taking all places of 5,000 or over—the lowest population for which comparative figures are readily available —52·3 p.c. of the population of the United States resided in such places as compared with 41·73 p.c. of the population of Canada, showing the much higher degree of urbanization which has been reached in the United States—a natural thing in an older settled and more densely peopled country.

On the basis of the census classification, it is apparent from Table **19** that in the decade 1921-31, as in the previous one, urban communities absorbed nearly 77 p.c. of the total increase in population, with the result that the urban population of Canada in 1931 exceeded the rural by 767,330. Out of every 1,000 persons in the country, 463 were resident, on June 1, 1931, in rural and 537 in urban communities, as compared with 505 in rural and 495 in urban communities on June 1, 1921; 546 in rural and 454 in urban communities in 1911; 625 in rural and 375 in urban communities in 1901; and 682 in rural and 318 in urban communities in 1891.

From Table **20,** showing the distribution of urban population in Canada by size of cities and towns, it is seen that Canada possessed, in 1931, two cities of more than half a million population. These are Montreal and Toronto, with 818,577 and 631,207 inhabitants, respectively. Two other cities, Vancouver and Winnipeg, have attained the 200,000 mark and Hamilton, Quebec, and Ottawa each have populations of over 100,000. The two western cities of Calgary and Edmonton are now in the 75,000 to 100,000 class. In this respect London, which excelled Edmonton in 1921, now takes the next lower place with a population of 71,148. Details of the population of these and other smaller cities and towns of 5,000 or over, are given by censuses from 1871 to 1931 in Table **21,** while the populations of urban communities having, in 1931, a population of from 1,000 to 5,000 each, are given for 1901, 1911, 1921, and 1931 in Table **22.**

All the larger cities have in their neighbourhoods growing "satellite" towns or other densely settled areas in close economic relationship with the central municipality. This phenomenon is to-day of increasing importance largely as a result of the greater ease and speed of transportation by motor vehicle. It has, therefore, been considered advisable to calculate the total populations resident in what the United

---

* In the United States, urban population, prior to 1930, was classified by the Census Bureau as that residing in cities and other incorporated places having 2,500 inhabitants or more with certain minor qualifications, but in 1930 the definition was slightly modified to include townships and other political divisions, not incorporated as municipalities, having a total population of 10,000 or more each, and a population density of 1,000 or more per square mile. The direct result of this modification has been to increase slightly the proportion of urban population.

States census authorities call the "metropolitan districts". On this basis the total populations of the larger cities at the Census of 1931 were as follows: Greater Montreal, 1,000,159; Greater Toronto, 808,864; Greater Vancouver, 308,340; Greater Winnipeg, 280,202; Greater Ottawa (including Hull), 175,988; Greater Quebec, 166,435; Greater Hamilton, 163,710; Greater Windsor, 110,385; Greater Halifax, 74,161; and Greater Saint John, 55,611.*

---

* See 1931 Census Monograph No. 6, *The Rural and Urban Composition of the Canadian Population*, by S. A. Cudmore and H. G. Caldwell.

19.—Rural and Urban Populations, by Provinces and Territories, Decennial Censuses 1871-1931 and Numerical Increases 1921-31.

Province or Territory.	1871.		1881.		1891.		1901.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
P. E. Island	86,149	7,872	95,693	13,198	94,823	14,255	88,304	14,955
Nova Scotia	355,718	32,082	377,030	63,542	373,403	76,993	330,191	129,383
New Brunswick	235,381	50,213	262,141	59,092	272,362	48,901[1]	253,835	77,285
Quebec	919,665	271,851	980,515	378,512	988,820	499,715	994,833	654,065
Ontario	1,264,854	355,997	1,351,074	575,848	1,295,323	818,998	1,246,969	935,978
Manitoba	24,170	1,058	52,015	10,245	111,498	41,008	184,775[2]	70,436[2]
Saskatchewan	[3]	–	[3]	–	[3]	–	77,013[4]	14,266[4]
Alberta	[3]	–	[3]	–	[3]	–	54,489	18,533
British Columbia	32,977	3,270	40,389	9,070	60,945	37,228	88,478	90,179
Yukon	[3]	–	[3]	–	[3]	–	18,077	9,142
N.W.T.	[3]	–	[3]	–	[3]	–	20,129	–
Royal Canadian Navy	–	–	–	–	–	–	–	–
Canada	**2,966,914**[3]	**722,343**	**3,215,303**[3]	**1,109,507**	**3,296,141**[3]	**1,537,098**	**3,357,093**	**2,014,222**

Province or Territory.	1911.		1921.		1931.		Numerical Increases in Decade 1921-31.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
P. E. Island	78,758	14,970	69,522	19,093	67,653	20,385	−1,869	1,292
Nova Scotia	306,210	186,128	296,799	227,038	281,192	231,654	−15,607	4,616
New Brunswick	252,342	99,547	263,432	124,444	279,279	128,940	15,847	4,496
Quebec	1,038,934[5]	966,842[5]	1,038,096	1,322,569	1,060,649	1,813,606	22,553	491,037
Ontario	1,198,803[6]	1,328,489	1,227,030	1,706,632	1,335,691	2,095,992	108,661	389,360
Manitoba	261,029[6]	200,365	348,502	261,616	384,170	315,969	35,668	54,353
Saskatchewan	361,037[4]	131,395[4]	538,552	218,958	630,880	290,905	92,328	71,947
Alberta	236,633[7]	137,662[7]	365,550	222,904	453,097	278,508	87,547	55,604
British Columbia	188,796	203,684	277,020	247,562	299,524	394,739[8]	22,504	147,177
Yukon	4,647	3,865	2,851	1,306	2,870	1,360	19	54
N.W.T.	6,507[6]	–	7,988	–	9,723	–	1,735	–
Royal Canadian Navy	–	–	485	–	[9]	–	[9]	–
Canada	**3,933,696**	**3,272,947**	**4,435,827**	**4,352,122**	**4,804,728**	**5,572,058**	**368,901**	**1,219,936**

[1] Some of the towns of 1891 were included with rural. [2] As corrected in Census Report, Prairie Provinces, 1916. [3] The populations (48,000, 56,446, and 98,967, respectively) in territory now comprised in the provinces of Alberta and Saskatchewan and in Yukon and the Northwest Territories was classified as rural in the censuses of 1871, 1881, and 1891. [4] Urban and rural populations for 1911 and 1901 are as corrected in Census Report, Prairie Provinces, 1916. [5] The urban population of 970,791, shown in Vol. I, Census 1911, is reduced to 966,842 by the transfer of the populations of Maniwaki, Martinville, Moïsie, St. Bruno, St. Martin, and St-Vincent de Paul from urban to rural; by adjustments in area of the villages of St. Anne and Ste. Geneviève; and Extension of Boundaries Act, 1912. [6] As changed by Extension of Boundaries Act, 1912. [7] Vol. I, Census 1911, places the urban population of Alberta for that year at 141,937. Included in this figure was the population (5,250) of twelve places which, according to the Report of the Municipal Commissioner for Alberta, were not then incorporated. The places so included were Aetna, Banff, Bankhead, Bellevue, Bickerdike, Canmore, Cardiff, Exshaw, Hillcrest, Passburg, Queenston, and Elmpark. The correction resulting from this and from other small adjustments consequent upon more definite knowledge as to incorporated areas, places the urban population for 1911 at 137,662. Similar corrections have been made in the urban and rural figures for the Census of 1901. [8] This includes South Vancouver and Point Grey, with 1921 populations of 32,267 and 13,736, respectively, which were then classified as 'rural'. [9] Members of the Royal Canadian Navy were counted at their homes in the Census of 1931.

20.—Urban Populations, Classified by Size of Municipality Groups, 1911, 1921, and 1931.

In Cities, Towns, or Villages of—	1911.			1921.			1931.		
	Number of Places.	Population.	Per Cent of Total Pop.	Number of Places.	Population.	Per Cent of Total Pop.	Number of Places.	Population.	Per Cent of Total Pop.
Over 500,000........	Nil	–	–	2	1,140,399	12·98	2	1,449,784	13·97
Between—									
400,000 and 500,000	1	490,504	6·81	Nil	–	–	Nil	–	–
300,000 and 400,000	1	381,833	5·30	"	–	–	"	–	–
200,000 and 300,000	Nil	–	–	"	–	–	2	465,378	4·48
100,000 and 200,000	2	236,436	3·28	4	518,298	5·90	3	413,013	3·98
50,000 and 100,000	3	247,221	3·43	5	336,650	3·83	7	470,443	4·53
25,000 and 50,000	7	272,071	3·78	7	239,096	2·72	10	339,521	3·27
15,000 and 25,000	11	193,977	2·69	19	370,990	4·22	23	457,292	4·41
10,000 and 15,000	18	225,423	3·13	18	224,033	2·55	23	275,944	2·66
5,000 and 10,000	44	313,100	4·34	54	382,762	4·36	68	458,784	4·42
3,000 and 5,000	59	222,274	3·08	72	272,720	3·10	71	273,276	2·63
1,000 and 3,000	250	428,250	5·94	293	492,116	5·60	324	557,466	5·37
500 and 1,000	241	174,781	2·43	290	215,648	2·45	322	231,375	2·23
Under 500...........	419	87,077	1·21	679	159,410	1·81	750	179,782	1·73
Totals........	**1,056**	**3,272,947**	**45·42**	**1,443**	**4,352,122**	**49·52**	**1,605**	**5,572,058**	**53·70**

Population is shown in Table **20** to be increasingly attracted to the larger cities. Thus, not only have cities of over 500,000 population (Montreal and Toronto) increased their proportions to the total, but cities of from 100,000 to 500,000 have increased their aggregate population from 5·90 p.c. of the total to 8·46 p.c., and cities of between 5,000 and 100,000 from 17·68 p.c. to 19·29 p.c. in the decade 1921-31. As will be seen, the large absolute increases in the total population of municipalities of less than 1,000 persons for 1921 and 1931 were due almost entirely to the addition of newly incorporated places.*

---

*See also reference in text footnote (*) at top of p. 101.

21.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936.[1]

NOTE.—The cities and towns in which a Board of Trade exists are indicated by an asterisk (*), and those in which there is a Chamber of Commerce by a dagger (†). In all cases the populations for previous censuses have been rearranged as far as possible to cover the same area as in 1931.

City or Town.	Province.	Populations.							
		1871.	1881.	1891.	1901.	1911.	1921.	1931.	1936.[1]
*†Montreal............	Que.........	130,833	177,377	256,723	328,172	490,504	618,506	818,577	–
*Toronto............	Ont.........	59,000	96,196	181,215	209,892	381,833	521,893	631,207	–
*Vancouver..........	B.C.........	–	–	13,709	29,432	120,847	163,220	246,593	–
*Winnipeg............	Man.........	241	7,985	25,639	42,340	136,035	179,087	218,785	215,814
†Hamilton............	Ont.........	26,880	36,661	48,959	52,634	81,969	114,151	155,547	–
*Quebec............	Que.........	59,699	62,446	63,090	68,840	78,710	95,193	130,594	–
*Ottawa............	Ont.........	24,141	31,307	44,154	59,928	87,062	107,843	126,872	–
*Calgary............	Alta........	–	–	3,876	4,392	43,704	63,305	83,761	83,407
†Edmonton..........	Alta........	–	–	–	4,176	31,064	58,821	79,197	85,774
†London............	Ont.........	18,000	27,867	31,977	37,976	46,300	60,959	71,148	–
†Windsor............	Ont.........	4,253	6,561	10,322	12,153	17,829	38,591	63,108	–
†Verdun............	Que.........	–	278	296	1,898	11,629	25,001	60,745	–
*Halifax............	N.S.........	29,582	36,100	38,437	40,832	46,619	58,372	59,275	–
*Regina............	Sask........	–	–	–	2,249	30,213	34,432	53,209	53,354
*Saint John..........	N.B.........	41,325	41,353	39,179	40,711	42,511	47,166	47,514	–
*Saskatoon..........	Sask........	–	–	–	113	12,004	25,739	43,291	41,734
†Victoria............	B.C.........	3,270	5,925	16,841	20,919	31,660	38,727	39,082	–
†Three Rivers.......	Que.........	7,570	8,670	8,334	9,981	13,691	22,367	35,450	–
*Kitchener..........	Ont.........	2,743	4,054	7,425	9,747	15,196	21,763	30,793	–
*Brantford..........	Ont.........	8,107	9,616	12,753	16,619	23,132	29,440	30,107	–
†Hull................	Que.........	3,800	6,890	11,264	13,993	18,222	24,117	29,433	–
†Sherbrooke.........	Que.........	4,432	7,227	10,097	11,765	16,405	23,515	28,933	–
Outremont..........	Que.........	–	387	795	1,148	4,820	13,249	28,641	–
†Fort William........	Ont.........	–	690	2,176	3,633	16,499	20,541	26,277	–
†St. Catharines......	Ont.........	7,864	9,631	9,170	9,946	12,484	19,881	24,753	–

---

[1] The 1936 figures cover cities and towns of the Prairie Provinces only.

21.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936[1]—continued.

City or Town.	Province.	Populations.							
		1871.	1881.	1891.	1901.	1911.	1921.	1931.	1936.[1]
Westmount	Que.	200	884	3,076	8,856	14,579	17,593	24,235	-
†Kingston	Ont.	12,407	14,091	19,263	17,961	18,874	21,753	23,439	-
†Oshawa	Ont.	3,185	3,992	4,066	4,394	7,436	11,940	23,439	-
*Sydney	N.S.	1,700	2,180	2,427	9,909	17,723	22,545	23,089	-
*Sault Ste. Marie	Ont.	879	780	2,414	7,169	14,920	21,092	23,082	-
†Peterborough	Ont.	4,611	6,812	9,717	12,886	18,360	20,994	22,327	-
*Moose Jaw	Sask.	-	-	-	1,558	13,823	19,285	21,299	19,805
*Guelph	Ont.	6,878	9,890	10,537	11,496	15,175	18,128	21,075	-
*Glace Bay	N.S.	-	-	2,459	6,945	16,562	17,007	20,706	-
*Moncton	N.B.	600	5,032	8,762	9,026	11,345	17,488	20,689	-
†Port Arthur	Ont.	-	1,275	2,698	3,214	11,220	14,886	19,818	-
†Niagara Falls	Ont.	1,610	2,347	3,349	5,702	9,248	14,764	19,046	-
†Lachine	Que.	2,689	3,248	4,819	6,365	11,688	15,404	18,630	-
*Sudbury	Ont.	-	-	-	2,027	4,150	8,621	18,518	-
†Sarnia	Ont.	2,929	3,874	6,692	8,176	9,947	14,877	18,191	-
*Stratford	Ont.	4,313	8,239	9,500	9,959	12,946	16,094	17,742	-
*New Westminster	B.C.	-	1,500	6,678	6,499	13,199	14,495	17,524	-
*Brandon	Man.	-	-	3,778	5,620	13,839	15,397	17,082	16,461
*St. Boniface	Man.	817	1,283	1,553	2,019	7,483	12,821	16,305	16,275
*North Bay	Ont.	-	-	1,848	2,530	7,737	10,692	15,528	-
†St. Thomas	Ont.	2,197	8,367	10,366	11,485	14,054	16,026	15,430	-
†Shawinigan Falls	Que.	-	-	-	-	4,265	10,625	15,345	-
*Chatham	Ont.	5,873	7,873	9,052	9,068	10,770	13,256	14,569	-
†East Windsor	Ont.	-	-	-	-	-	5,780	14,251	-
*Timmins	Ont.	-	-	-	-	-	3,843	14,200	-
*Galt	Ont.	3,827	5,187	7,535	7,866	10,299	13,216	14,006	-
†Belleville	Ont.	7,305	9,516	9,916	9,117	9,876	12,206	13,790	-
*Lethbridge	Alta.	-	-	-	2,072	9,035	11,097	13,489	13,523
†St. Hyacinthe	Que.	3,746	5,321	7,016	9,210	9,797	10,859	13,448	-
*Owen Sound	Ont.	3,369	4,426	7,497	8,776	12,558	12,190	12,839	-
*Charlottetown	P.E.I.	7,872	10,345	10,098	10,718	9,883	10,814	12,361	-
†Chicoutimi	Que.	1,393	1,935	2,277	3,826	5,880	8,937	11,877	-
†Lévis	Que.	8,052	8,734	8,797	9,242	8,703	10,470	11,724	-
*Valleyfield (Salaberry de)	Que.	1,800	3,906	5,515	11,055	9,449	9,215	11,411	-
*Woodstock	Ont.	3,982	5,373	8,612	8,833	9,320	9,935	11,395	-
*St. Jean	Que.	3,022	4,314	4,722	4,030	5,903	7,734	11,256	-
*Cornwall	Ont.	2,033	4,468	6,805	6,704	6,598	7,419	11,126	-
†Joliette	Que.	3,047	3,268	3,372	4,220	6,346	9,039	10,765	-
†Sandwich	Ont.	1,160	1,143	1,352	1,450	2,302	4,415	10,715	-
*Welland	Ont.	1,110	1,870	2,035	1,863	5,318	8,654	10,709	-
Thetford Mines	Que.	-	-	-	3,256	7,261	8,272	10,701	-
*Granby	Que.	876	1,040	1,710	3,773	4,750	6,785	10,587	-
†Sorel	Que.	5,636	5,791	6,669	7,057	8,420	8,174	10,320	-
†Medicine Hat	Alta.	-	-	-	1,570	5,608	9,634	10,300	9,592
†Walkerville	Ont.	-	-	933	1,595	3,302	7,059	10,105	-
*Prince Albert	Sask.	-	-	-	1,785	6,254	7,352	9,905	11,049
†Brockville	Ont.	5,102	7,609	8,791	8,940	9,374	10,043	9,736	-
Jonquière	Que.	-	-	-	-	2,354	4,851	9,448	-
†Pembroke	Ont.	1,508	2,820	4,401	5,156	5,626	7,875	9,368	-
*Dartmouth	N.S.	2,191	3,786	6,252	4,806	5,058	7,899	9,100	-
†St. Jérôme	Que.	1,159	2,032	2,868	3,619	3,473	5,491	8,967	-
*New Glasgow	N.S.	1,676	2,595	3,776	4,447	6,383	8,974	8,858	-
*Fredericton	N.B.	6,006	6,218	6,502	7,117	7,208	8,114	8,830	-
Cap de la Madeleine	Que.	-	-	-	-	-	6,738	8,748	-
North Vancouver	B.C.	-	-	-	365	8,196	7,652	8,510	-
†Rivière du Loup	Que.	1,541	2,291	4,175	4,569	6,774	7,703	8,499	-
*Orillia	Ont.	1,322	2,910	4,752	4,907	6,828	7,631	8,183	-
*Waterloo	Ont.	1,594	2,066	2,941	3,537	4,359	5,883	8,095	-
*Truro	N.S.	2,114	3,461	5,102	5,993	6,107	7,562	7,901	-
†La Tuque	Que.	-	-	-	-	2,934	5,603	7,871	-
*Barrie	Ont.	3,398	4,854	5,550	5,949	6,420	6,936	7,776	-
*Sydney Mines	N.S.	1,494	2,340	2,442	3,191	7,470	8,327	7,769	-
*New Waterford	N.S.	-	-	-	-	-	5,615	7,745	-
*Trail	B.C.	-	-	-	1,360	1,460	3,020	7,573	-
*Lindsay	Ont.	4,049	5,080	6,081	7,003	6,964	7,620	7,505	-
*Amherst	N.S.	1,839	2,274	3,781	4,964	8,973	9,998	7,450	-
New Toronto	Ont.	-	-	-	209	686	2,669	7,146	-
†Smiths Falls	Ont.	1,150	2,087	3,864	5,155	6,370	6,790	7,108	-
Lauzon	Que.	2,827	4,578	4,391	4,267	4,982	6,428	7,084	-
*Yarmouth	N S.	4,696	5,324	6,089	6,430	6,600	7,073	7,055	-
†Midland	Ont.	-	1,095	2,088	3,174	4,663	7,016	6,920	-
Mimico	Ont.	-	-	-	437	1,373	3,751	6,800	-

---

[1] The 1936 figures cover cities and towns of the Prairie Provinces only.

21.—Populations of Cities and Towns having over 5,000 Inhabitants, Decennial Censuses 1871-1931 and the Quinquennial Census of 1936[1]—concluded.

City or Town.	Province.	Populations.							
		1871.	1881.	1891.	1901.	1911.	1921.	1931.	1936.[1]
*Kenora	Ont.	–	–	1,806	5,202	6,158	5,407	6,766	–
*Nanaimo	B.C.	–	1,645	4,595	6,130	6,254	6,559	6,745	–
Eastview	Ont.	–	–	–	–	3,169	5,324	6,686	–
†Drummondville	Que.	–	900	1,955	1,450	1,725	2,852	6,609	–
*Portage la Prairie	Man.	–	–	3,363	3,901	5,892	6,766	6,597	6,538
*Campbellton	N.B.	–	–	1,782	2,652	3,817	5,570	6,505	–
†Port Colborne	Ont.	988	1,716	1,154	1,253	1,624	3,415	6,503	–
†Grand'Mère	Que.	–	–	–	2,511	4,783	7,631	6,461	–
*Edmundston	N.B.	–	–	–	–	1,821	4,035	6,430	–
*Springhill	N.S.	–	900	4,813	4,559	5,713	5,681	6,355	–
†Prince Rupert	B.C.	–	–	–	–	4,184	6,393	6,350	–
*Magog	Que.	–	–	2,100	3,516	3,978	5,159	6,302	–
*Preston	Ont.	1,408	1,419	1,843	2,308	3,883	5,423	6,280	–
†Trenton	Ont.	1,796	3,042	4,363	4,217	3,988	5,902	6,276	–
†Victoriaville	Que.	1,425	1,474	1,300	1,693	3,028	3,759	6,213	–
*Kamloops	B.C.	–	–	–	–	3,772	4,501	6,167	–
*North Sydney	N.S.	1,200	1,520	2,513	4,646	5,418	6,585	6,139	–
*St. Lambert	Que.	327	332	906	1,362	3,344	3,890	6,075	–
*Nelson	B.C.	–	–	–	5,273	4,476	5,230	5,992	–
*North Battleford	Sask.	–	–	–	–	2,105	4,108	5,986	4,719
†Cobourg	Ont.	4,442	4,957	4,829	4,239	5,074	5,327	5,834	–
*Collingwood	Ont.	2,829	4,445	4,939	5,755	7,090	5,882	5,809	–
Transcona	Man.	–	–	–	–	–	4,185	5,747	5,578
†Rimouski	Que.	1,186	1,417	1,429	1,804	3,097	3,612	5,589	–
†Brampton	Ont.	2,090	2,920	3,252	2,748	3,412	4,527	5,532	–
*Fort Frances	Ont.	–	–	1,339	1,163	1,611	3,109	5,470	–
Longueuil	Que.	2,083	2,355	2,757	2,835	3,972	4,682	5,407	–
St. Laurent	Que.	–	–	1,184	1,390	1,860	3,232	5,348	–
*Renfrew	Ont.	865	1,605	2,611	3,153	3,846	4,906	5,296	–
*Swift Current	Sask.	–	–	–	121	1,852	3,518	5,296	5,074
†Ingersoll	Ont.	4,022	4,318	4,191	4,573	4,763	5,150	5,233	–
†Simcoe	Ont.	1,856	2,645	2,674	2,627	3,227	3,953	5,226	–
Forest Hill (village)	Ont.	–	–	–	–	–	–	5,207	–
*Hawkesbury	Ont.	1,671	1,920	2,042	4,150	4,400	5,544	5,177	–
†Thorold	Ont.	1,635	2,456	2,273	1,979	2,273	4,825	5,092	–
†Whitby	Ont.	2,732	3,140	2,786	2,110	2,248	3,957	5,046	–
Swansea (village)	Ont.	–	–	–	–	–	–	5,031	–
*Yorkton	Sask.	–	–	–	700	2,309	5,151	5,027	4,931
*Dundas	Ont.	3,135	3,709	3,546	3,173	4,299	4,978	5,026	–
*Stellarton	N.S.	1,750	1,599	2,410	2,335	3,910	5,312	5,002	–
*Weyburn	Sask.	–	–	–	113	2,210	3,193	5,002	5,338

[1] The 1936 figures cover cities and towns of the Prairie Provinces only.

22.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936.[1]

Town or Village.	1901.	1911.	1921.	1931.	Town or Village.	1901.	1911.	1921.	1931.
Prince Edward Island.					**Nova Scotia**—concluded.				
Summerside	2,875	2,678	3,228	3,759	Bridgetown	858	996	1,086	1,126
Souris	1,140	1,089	1,094	1,063	Mahone Bay	866	951	1,177	1,065
Nova Scotia.					Port Hawkesbury	633	684	869	1,011
Westville	3,471	4,417	4,550	3,946	Joggins	1,088	1,648	1,732	1,000
Bridgewater	2,203	2,775	3,147	3,262					
Pictou	3,235	3,179	2,988	3,152	**New Brunswick.**				
Kentville	1,731	2,304	2,717	3,033	Chatham	4,868	4,666	4,506	4,017
Windsor	2,849	2,894	2,946	3,032	Dalhousie	862	1,650	1,958	3,974
Inverness	306	2,719	2,963	2,900	St. Stephen	2,840	2,836	3,452	3,437
Dominion	1,546	2,589	2,390	2,846	Newcastle	2,507	2,945	3,507	3,383
Lunenburg	2,916	2,681	2,792	2,727	Bathurst	1,044	960	3,327	3,300
Liverpool	1,937	2,109	2,294	2,669	Woodstock	3,644	3,856	3,380	3,259
Trenton	1,274	1,749	2,844	2,613	Sussex	1,398	1,906	2,198	2,252
Parrsboro	2,705	2,224	2,161	1,919	Sackville	1,444	2,039	2,173	2,234
Wolfville	1,412	1,458	1,743	1,818	Devon	–	–	1,924	1,977
Antigonish	1,838	1,787	1,746	1,764	Shediac	1,075	1,442	1,973	1,883
Canso	1,479	1,617	1,626	1,575	Milltown	2,044	1,804	1,976	1,735
Shelburne	1,445	1,435	1,360	1,474	Grand Falls	644	1,280	1,327	1,556
Digby	1,150	1,247	1,230	1,412	Marysville	1,892	1,837	1,614	1,512
Wedgeport	1,026	1,392	1,424	1,294	St. Andrews	1,064	987	1,065	1,207
Oxford	1,285	1,392	1,402	1,133	St. George	733	988	1,110	1,087

[1] The 1936 figures cover towns and villages of the Prairie Provinces only.

22.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936[1]—continued.

Town or Village.	1901.	1911.	1921.	1931.
Quebec.				
St. Jérôme de Matane	1,176	2,056	3,050	4,757
Buckingham	2,936	3,854	3,835	4,638
Montmorency	–	2,710	3,367	4,575
Montreal North	–	–	1,360	4,519
Kénogami	–	–	2,557	4,500
Asbestos	783	2,224	2,189	4,396
Farnham	3,114	3,560	3,343	4,205
St. Pierre	505	2,201	3,535	4,185
Pointe Claire	555	793	2,617	4,058
Coaticook	2,880	3,165	3,554	4,044
St. Joseph d'Alma	–	–	850	3,970
Montmagny	1,919	2,617	4,145	3,927
Mégantic	2,171	2,816	3,140	3,911
Lachute	2,022	2,407	2,592	3,906
Beauharnois	1,976	2,015	2,250	3,729
Giffard	–	–	1,254	3,573
East Angus	–	–	3,802	3,566
Ste. Thérèse	1,541	2,120	3,043	3,292
Beauport	–	–	3,240	3,242
Rouyn	–	–	–	3,225
Montreal West	352	703	1,882	3,190
Mont Joli	822	2,141	2,799	3,143
Pointe aux Trembles	–	1,167	2,350	2,970
Ste. Agathe des Monts	1,073	2,020	2,812	2,949
Baie St. Paul	1,408	1,857	2,291	2,916
Nicolet	2,225	2,593	2,342	2,868
Aylmer	2,291	3,109	2,970	2,835
Charny	–	1,408	2,265	2,823
St. Joseph de Grantham	–	–	–	2,812
Iberville	1,512	1,905	2,454	2,778
Laprairie	1,451	2,388	2,158	2,774
Roberval	1,248	1,737	2,068	2,770
Windsor	2,149	2,233	2,330	2,720
Laval des Rapides	–	1,014	1,989	2,716
Donnacona	–	–	1,225	2,631
Richmond	2,057	2,175	2,450	2,596
Plessisville	1,586	1,559	2,032	2,536
Bagotville	507	1,011	2,204	2,468
Berthier	1,364	1,335	2,193	2,431
Ste. Anne de Bellevue	1,343	1,416	2,212	2,417
La Malbaie[2]	826	1,449	1,883	2,408
Mont Laurier	–	752	2,211	2,394
Louiseville	1,565	1,675	1,772	2,365
La Salle	–	–	726	2,362
Saindon	–	–	1,793	2,355
Port Alfred	–	–	1,213	2,342
Priceville	–	–	–	2,310
Pointe Gatineau	1,583	1,751	1,919	2,282
Loretteville	1,555	1,588	2,066	2,251
Noranda	–	–	–	2,246
Montreal East	–	–	1,776	2,242
Waterloo	1,797	1,886	2,063	2,192
Cabano	–	–	–	2,187
Mont Royal	–	–	160	2,174
Black Lake	–	2,645	2,656	2,167
Amos	–	–	1,488	2,153
Dorval	481	1,005	1,466	2,052
Dolbeau	–	–	–	2,032
Masson	1,012	1,034	950	2,015
Almaville	–	–	1,174	2,010
St. Marc des Carrières	296	1,224	1,492	1,997
Marieville	1,306	1,587	1,748	1,986
St. Tite	991	1,438	1,783	1,969
Terrebonne	1,822	1,990	2,056	1,955
Lennoxville	1,120	1,211	1,554	1,927
Ste. Anne de Beaupré	–	2,381	1,648	1,901
Charlesbourg	–	–	1,267	1,869
St. Joseph (Richelieu)	647	1,416	1,658	1,869
East Broughton	–	996	1,709	1,868
Cowansville	699	881	1,094	1,859
Témiscamingue	–	–	–	1,855
Trois Pistoles	–	–	1,454	1,837
Quebec West	–	–	130	1,813
Arvida (city)	–	–	–	1,790
Quebec– concluded.				
St. Alexis de la Grande Baie	–	1,355	1,735	1,790
Lac au Saumon	–	1,171	1,354	1,779
St. Raymond	1,272	1,653	1,693	1,772
Acton Vale	1,175	1.402	1,549	1,753
Chandler	–	–	1,756	1,741
Maniwaki	–	–	–	1,720
L'Epiphanie	–	–	–	1,705
Courville	–	910	1,293	1,678
Ste. Rose	1,154	1,480	1,811	1,661
Deschaillons	1,213	1,161	1,680	1,650
St. Benoit Joseph Labre	–	1,070	1,416	1,648
St. Joseph (Beauce)	1,117	1,440	1,445	1,625
Huntingdon	1,122	1,265	1,401	1,619
Greenfield Park	–	–	1,112	1,610
Arthabaska	995	1,458	1,234	1,608
St. Félicien	–	581	1,306	1,599
Ste. Marie	–	–	1,311	1,598
L'Assomption	1,605	1,747	1,320	1,576
Bedford	1,364	1,432	1,669	1,570
St. Georges East	–	1,410	1,058	1,543
Lac St. Louis	–	–	597	1,537
St. Gabriel de Brandon	1,199	1,602	1,667	1,530
St. Jacques	–	–	1,332	1,529
St. Michel de Laval	–	–	493	1,528
Bromptonville	–	1,239	2,603	1,527
Montebello	795	954	977	1,501
Disraeli	1,018	1,606	1,646	1,437
Belœil	–	1,501	1,418	1,434
Rock Island	615	861	1,442	1,424
Causapscal	–	–	–	1,390
Danville	1,017	1,331	1,290	1,354
Pont Rouge	–	–	1,419	1,353
Pierreville	1,108	1,363	1,394	1,352
Baie de Shawinigan	–	1,024	1,213	1,316
St. Casimir	–	–	1,457	1,316
Thurso	525	601	538	1,292
Chambly Basin	849	900	1,068	1,287
Laurentides	934	1,128	1,150	1,284
La Providence	819	894	1,078	1,241
St. Jérôme	498	719	923	1,235
St. Pacôme	–	–	–	1,235
L'Abord-à-Plouffe	–	–	1,011	1,227
St. Rémi	1,080	1,021	1,135	1,201
Scotstown	791	933	987	1,189
St. Eustache	1,079	996	1,098	1,187
Montreal South	–	790	1,030	1,164
Dorion	275	631	833	1,155
Cap Chat	–	–	–	1,139
Fort Coulonge	482	811	973	1,130
St. Joseph de la Rivière Bleue	–	–	864	1,111
Ste. Anne de Chicoutimi	516	657	838	1,102
Rigaud	779	856	939	1,099
Châteauguay	–	–	881	1,067
L'Enfant Jésus	–	–	–	1,066
Rawdon	–	–	1,042	1,066
Beebe Plain	477	808	921	1,053
St. Césaire	865	941	985	1,051
Ville Marie	502	850	840	1,049
Rivière du Moulin	–	–	738	1,040
Val Brillant	–	–	962	1,032
Bic	–	–	912	1,020
Notre-Dame de Portneuf	–	–	877	1,017
Ontario.				
Leamington	2,451	2,652	3,675	4,902
Port Hope	4,188	5,092	4,456	4,723
Weston	1,083	1,875	3,166	4,723
Goderich	4,158	4,522	4,107	4,491
Riverside	–	–	1,155	4,432
Wallaceburg	2,763	3,438	4,006	4,326
Sturgeon Falls	1,418	2,199	4,125	4,234
Paris	3,229	4,098	4,368	4,137

[1] The 1936 figures cover towns and villages of the Prairie Provinces only.

[2] Also known as Murray Bay.

22.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936[1]—continued.

Town or Village.	1901.	1911.	1921.	1931.
Ontario—continued.				
Carleton Place	4,059	3,621	3,841	4,105
Perth	3,588	3,588	3,790	4,099
Bowmanville	2,731	2,814	3,233	4,080
Penetanguishene	2,422	3,568	4,037	4,035
Arnprior	4,152	4,405	4,077	4,023
Cochrane	-	1,715	2,655	3,963
Long Branch	-	-	-	3,962
Cobalt	-	5,638	4,449	3,885
Oakville	1,643	2,372	3,298	3,857
Kapuskasing	-	-	926	3,819
St. Marys	3,384	3,388	3,847	3,802
Newmarket	2,125	2,996	3,626	3,748
Gananoque	3,526	3,804	3,604	3,592
Picton	3,698	3,564	3,356	3,580
Bridgeburg	1,356	1,770	2,401	3,521
Parry Sound	2,884	3,429	3,546	3,512
Napanee	3,143	2,807	3,038	3,497
Dunnville	2,105	2,861	3,224	3,405
Tilsonburg	2,241	2,758	2,974	3,385
Copper Cliff	2,500	3,082	2,597	3,173
Hanover	1,392	2,342	2,781	3,077
Burlington	1,119	1,831	2,709	3,046
Prescott	3,019	2,801	2,636	2,984
Strathroy	2,933	2,823	2,691	2,964
New Liskeard	-	2,108	2,268	2,880
Huntsville	2,152	2,358	2,246	2,817
Haileybury	-	3,874	3,743	2,813
Blind River	2,656	2,558	1,843	2,805
Amherstburg	2,222	2,560	2,769	2,759
Hespeler	2,457	2,368	2,777	2,752
Campbellford	2,485	3,051	2,890	2,744
Portsmouth	1,827	1,786	2,351	2,741
Listowel	2,693	2,289	2,477	2,676
Meaford	1,916	2,811	2,650	2,624
Orangeville	2,511	2,340	2,187	2,614
Petrolia	4,135	3,518	3,148	2,596
Fergus	1,396	1,534	1,796	2,594
Aurora	1,590	1,901	2,307	2,587
Merritton	1,710	1,670	2,544	2,523
Humberstone	-	-	1,524	2,490
Kincardine	2,077	1,956	2,077	2,465
Bracebridge	2,479	2,776	2,451	2,436
Walkerton	2,971	2,601	2,344	2,431
Almonte	3,023	2,452	2,426	2,415
Fort Erie	890	1,146	1,546	2,383
Georgetown	1,313	1,583	2,061	2,288
Aylmer	2,204	2,102	2,194	2,283
Grimsby	1,001	1,669	2,004	2,198
Kingsville	1,537	1,427	1,783	2,174
Elmira	1,060	1,782	2,016	2,170
Tecumseh	-	-	978	2,129
Rockland	1,998	3,397	3,496	2,118
Sioux Lookout	-	550	1,127	2,088
Alexandria	1,911	2,323	2,195	2,006
Tilbury	1,012	1,368	1,673	1,992
Wingham	2,392	2,238	2,092	1,959
Essex	1,391	1,353	1,588	1,954
Ridgetown	2,405	1,954	1,855	1,952
Wiarton	2,443	2,266	1,726	1,949
Gravenhurst	2,146	1,624	1,478	1,864
Acton	1,484	1,720	1,722	1,855
Milton	1,372	1,654	1,873	1,839
Mount Forest	2,019	1,839	1,718	1,801
Clinton	2,547	2,254	2,018	1,789
Durham	1,422	1,581	1,494	1,750
Blenheim	1,653	1,387	1,565	1,737
Port Dover	1,177	1,138	1,462	1,707
Chesley	1,734	1,734	1,708	1,699
Seaforth	2,245	1,983	1,829	1,686
Capreol	-	-	1,287	1,684
Exeter	1,792	1,555	1,442	1,666
Port Credit	-	-	1,123	1,635
Thessalon	1,205	1,945	1,651	1,632
Mattawa	1,400	1,524	1,462	1,631
Ontario—concluded.				
Mitchell	1,945	1,766	1,800	1,588
Brighton	1,378	1,320	1,411	1,580
Port Dalhousie	1,125	1,152	1,492	1,547
Palmerston	1,850	1,665	1,523	1,543
Dresden	1,613	1,551	1,339	1,529
Southampton	1,636	1,685	1,537	1,489
Forest	1,553	1,445	1,422	1,480
Deseronto	3,527	2,013	1,847	1,476
Iroquois Falls	-	-	1,178	1,476
New Hamburg	1,208	1,484	1,351	1,436
Keewatin	1,156	1,242	1,327	1,422
Morrisburg	1,693	1,696	1,444	1,420
Rainy River	-	1,578	1,444	1,402
Caledonia	801	952	1,223	1,396
Hagersville	1,020	1,106	1,169	1,385
Vankleek Hill	1,674	1,577	1,499	1,380
Point Edward	780	874	1,258	1,362
Alliston	1,256	1,279	1,376	1,355
Lakefield	1,244	1,397	1,189	1,332
Dryden	140	715	1,019	1,326
Uxbridge	1,657	1,433	1,456	1,325
Cardinal	1,378	1,111	1,241	1,319
Port Elgin	1,313	1,235	1,291	1,305
Harriston	1,637	1,491	1,263	1,296
Richmond Hill	629	652	1,055	1,295
Kemptville	1,523	1,192	1,204	1,286
Tweed	1,168	1,368	1,339	1,271
Chippawa	460	707	1,137	1,266
Niagara	1,258	1,318	1,357	1,228
Waterford	1,122	1,083	1,123	1,213
Englehart	-	670	759	1,210
Beamsville	832	1,096	1,256	1,203
Elora	1,187	1,197	1,136	1,195
Havelock	984	1,436	1,268	1,173
Port Perry	1,465	1,148	1,143	1,163
Norwich	1,269	1,112	1,176	1,158
Stouffville	1,223	1,034	1,053	1,155
Cache Bay	384	889	926	1,151
Victoria Harbour	989	1,616	1,463	1,128
Delhi	823	825	733	1,121
L'Orignal	1,026	1,347	1,298	1,121
Little Current	728	1,208	923	1,101
Shelburne	1,188	1,113	1,072	1,077
Madoc	1,157	1,058	1,058	1,059
Parkhill	1,430	1,289	1,152	1,030
Tavistock	403	981	1,011	1,029
Winchester	1,101	1,143	1,126	1,027
Arthur	1,285	1,102	1,104	1,021
Eganville	1,107	1,189	1,015	1,020
Stayner	1,225	1,039	972	1,019
Colborne	1,017	999	932	1,015
Chesterville	932	883	967	1,012
Markham	967	909	1,012	1,008

Town or Village.	1901.	1911.	1921.	1931.	1936.[1]
Manitoba.					
Selkirk	2,188	2,977	3,726	4,486	4,566
Dauphin	1,135	2,815	3,885	3,971	4,147
The Pas	-	-	1,858	4,030	3,405
Brooklands	-	-	-	2,462	2,246
Neepawa	1,418	1,864	1,887	1,910	2,068
Minnedosa	1,052	1,483	1,505	1,680	1,686
Virden	901	1,550	1,361	1,590	1,481
Souris	839	1,854	1,710	1,661	1,480
Morden	1,522	1,130	1,268	1,416	1,462
Carman	1,439	1,271	1,591	1,418	1,364
Beauséjour	-	847	994	1,139	1,154
Winkler	391	458	812	1,005	1,036
Tuxedo	-	-	1,062	1,173	1,017
Swan River	-	574	903	968	1,016
Stonewall	589	1,005	1,112	1,031	1,009
Killarney	585	1,010	871	1,003	978

---

[1] The 1936 figures cover towns and villages of the Prairie Provinces only.

22.—Populations of Towns and Villages having between 1,000 and 5,000 Inhabitants, Decennial Censuses 1901-31 and the Quinquennial Census of 1936[1]—concluded.

Town or Village.	1901.	1911.	1921.	1931.	1936.[1]
Saskatchewan.					
Melville	–	1,816	2,808	3,891	3,923
Estevan	141	1,981	2,290	2,936	2,854
Biggar	–	315	1,535	2,369	1,953
Melfort	–	599	1,746	1,809	1,948
Humboldt	–	859	1,822	1,899	1,819
Kamsack	–	473	2,002	2,087	1,810
Shaunavon	–	–	1,146	1,761	1,636
Rosetown	–	317	865	1,553	1,520
Lloydminster[2]	–	663	755	1,516	1,420
Indian Head	768	1,285	1,439	1,438	1,365
Rosthern	413	1,172	1,074	1,412	1,355
Assiniboia	–	–	1,006	1,454	1,257
Canora	–	435	1,230	1,179	1,254
Tisdale	–	250	783	1,069	1,152
Watrous	–	781	1,101	1,303	1,147
Wilkie	–	537	778	1,222	1,220
Battleford	609	1,335	1,229	1,096	1,128
Wynyard	–	515	849	1,042	1,110
Moosomin	868	1,143	1,099	1,119	1,104
Maple Creek	382	936	1,002	1,154	1,032
Kindersley	–	456	1,003	1,037	1,030
Gravelbourg	–	–	1,106	1,137	985
Sutherland	–	421	961	1,148	942
Herbert	–	559	827	1,009	900
Radville	–	233	883	1,005	854
Alberta.					
Drumheller (city)	–	–	2,499	2,987	2,912
Red Deer (city)	323	2,118	2,328	2,344	2,384
Camrose	–	1,586	1,892	2,258	2,263
Coleman	–	1,557	1,590	1,704	2,129
Raymond	–	1,465	1,394	1,849	2,094
Wetaskiwin (city)	550	2,411	2,061	2,125	2,058
Cardston	639	1,207	1,612	1,672	1,711
Blairmore	231	1,137	1,552	1,629	1,682
Vegreville	–	1,029	1,479	1,659	1,672
Edson	–	497	1,138	1,547	1,600
Grande Prairie	–	–	1,061	1,464	1,478
Lacombe	499	1,029	1,133	1,259	1,414
Hanna	–	–	1,364	1,490	1,405
Macleod	796	1,844	1,723	1,447	1,365
High River	153	1,182	1,198	1,459	1,359
Taber	–	1,400	1,705	1,279	1,341
Vermilion	–	625	1,272	1,270	1,291
Alberta—concluded.					
Newcastle	–	–	–	304	1,278
Magrath	424	995	1,069	1,224	1,217
Stettler	–	1,444	1,416	1,219	1,202
Olds	218	917	764	1,056	1,197
Innisfail	317	602	941	1,024	1,124
Claresholm	–	809	963	1,156	1,051
Wainwright	–	788	975	1,147	1,048
Ponoka	151	642	712	836	1,045
Pincher Creek	335	1,027	888	1,024	999
Beverly	–	–	1,039	1,111	998
Redcliff	–	220	1,137	1,192	990
Fort Saskatchewan	306	782	982	1,001	899
British Columbia.					
Kelowna (city)	261	1,663	2,520	4,655	–
Vernon (city)	802	2,671	3,685	3,937	–
Cranbrook (city)	1,196	3,090	2,725	3,067	–
Rossland (city)	6,156	2,826	2,097	2,848	–
Revelstoke (city)	1,600	3,017	2,782	2,736	–
Fernie (city)	–	3,146	2,802	2,732	–
Prince George (city)	–	–	2,053	2,479	–
Chilliwack (city)	277	1,657	1,767	2,461	–
Cumberland (city)	732	1,237	2,161	2,371	–
Port Alberni (city)	–	–	1,056	2,356	–
Duncan (city)	–	–	1,178	1,843	–
Ladysmith (city)	746	2,517	1,151	1,443	–
Mission (village)	–	–	–	1,314	–
Port Coquitlam (city)	–	–	1,178	1,312	–
Grand Forks (city)	1,012	1,577	1,469	1,298	–
Merritt (city)	–	703	1,389	1,296	–
Port Moody (city)	–	–	1,030	1,260	–
Courtenay (city)	–	–	810	1,219	–

---

[1] The 1936 figures cover towns and villages of the Prairie Provinces only. [2] Under the Saskatchewan Town Act, Lloydminster, Alberta, is merged with Lloydminster, Saskatchewan, for municipal purposes.

Rural and Urban Farm Populations.—At p. 126 of the 1937 Year Book statistics of rural and urban farm population, by provinces, as compiled from the Census of 1931 were given, and at p. 299 of the 1934-35 Year Book details regarding farm workers, those farms employing hired labour, the period of employment and the cost of labour were shown. The reader is also referred to the item "Wage-earners" (in agriculture) in the index of the present volume for further information on these topics.

Section 11.—Literacy.

The subject of literacy was discussed at pp. 131-132 of the 1936 Year Book. At p. 157 of the 1934-35 Year Book will be found a table showing the literacy of the population of 5 years or over from 1901 to 1931, at pp. 158-159 of the same edition the same information as is now summarized in Table 23 was given by sex, while on p. 160 was shown the literacy of the population of cities and towns of 30,000 population or over, as in 1931.

23.—Literacy of the Population of 10 Years of Age or Over, by Provinces, 1931.

Note.—Corresponding figures for 1921 are to be found in the 1924 Year Book, p. 131.

Province.	Population 10 Years or Over.	Can Read and Write.	Can Read only.	Can neither Read nor Write.	Percentages.		
					Can Read and Write.	Can Read only.	Can neither Read nor Write.
	No.	No.	No.	No.	p.c.	p.c.	p.c.
Prince Edward Island	69,333	66,996	502	1,835	96·63	0·72	2·65
Nova Scotia	402,401	382,472	2,790	17,139	95·05	0·69	4·26
New Brunswick	310,316	286,676	2,200	21,440	92·38	0·71	6·91
Quebec	2,167,517	2,048,778	15,527	103,212	94·52	0·72	4·76
Ontario	2,791,072	2,719,558	7,357	64,157	97·44	0·26	2·30
Manitoba	557,806	530,779	2,151	24,876	95·15	0·39	4·46
Saskatchewan	705,350	672,812	3,441	29,097	95·39	0·49	4·13
Alberta	572,129	549,789	2,671	19,669	96·10	0·47	3·44
British Columbia	583,135	558,417	1,630	23,088	95·76	0·28	3·96
Yukon	3,542	2,710	30	802	76·51	0·85	22·64
Northwest Territories	7,021	2,832	108	4,081	40·34	1·54	58·13
Canada	**8,169,622**	**7,821,819**	**38,407**	**309,396**	**95·74**	**0·47**	**3·79**

Section 12.—School Attendance.

At pp. 132-133 of the 1936 Year Book a treatment of this subject will be found, together with tables showing school attendance, (1) of the population 5-19 years of age, by sex, for the census years 1911, 1921, and 1931, (2) of the total rural and urban populations, by sex, for 1931, and (3) of the population 7-14 years of age, by nativity and sex, for 1931.

Section 13.—Blind and Deaf-Mutes.

The 1936 Year Book showed, at pp. 134-135, figures of the number of blind and deaf-mutes by provinces and sex in 1931, together with the number and proportion of such persons as found at the decennial censuses from 1881 to 1931. Summary statistics are given below.

24.—Deaf-Mutes[1] by Number and Proportion per 10,000 Population, by Provinces, 1881-1931.

Province.	Number.						Proportions per 10,000 Population.					
	1881.	1891.	1901.	1911.	1921.	1931.	1881.	1891.	1901.	1911.	1921.	1931.
Prince Edward Island	122	87	98	46	40	45	11·2	8·0	9·5	5·0	4·5	5·1
Nova Scotia	581	495	627	472	437	456	13·2	11·0	13·6	9·6	8·3	8·9
New Brunswick	401	354	443	273	297	345	12·5	11·0	13·4	7·8	7·6	8·5
Quebec	2,225	2,108	2,488	1,635	1,891	2,778	16·4	14·2	15·1	8·2	8·0	9·7
Ontario	1,963	1,603	2,002	1,410	1,842	1,807	10·2	7·6	9·2	5·6	6·3	5·3
Manitoba	49	102	291	296	273	467	7·9	6·7	11·4	6·5	4·5	6·7
Saskatchewan	–	–	73	180	256	361	–	–	8·0	3·7	3·4	3·9
Alberta	–	–	45	147	163	290	–	–	6·2	3·9	2·8	4·0
British Columbia	27	44	92	108	132	218	5·5	4·5	5·1	2·8	2·5	3·1
Totals, Nine Provinces	**5,368**	**4,793**	**6,159**	**4,567**	**5,331**	**6,767**	**12·6**	**10·1**	**11·6**	**6·4**	**6·1**	**6·5**

---

[1] Not including blind deaf-mutes.

Section 14.—Dwellings and Family Households.

An extensive treatment of this subject, as it came under observation at the Census of 1931, will be found at pp. 136-139 of the 1936 Year Book.

Two additional tables are given below which supplement that treatment. The first, Table **25**, shows a classification of a very important family unit, *viz.*, one-family urban householders living in rented homes. These data throw light on the housing situation since the housing problem chiefly affects those urban families that pay rent. The extent to which overcrowding exists among families with low earnings living in low rental dwellings is clear from a study of the figures.

Table **26** is interesting as showing family composition in regard to heads, dependants, and (in detail) children.

25.—Classification of Urban Households of One Family with Husband and Wife Living Together in Rented Home, by Rent Paid, Earnings, etc., Canada, 1931.

Monthly Rental.	Households.	Persons.	Persons per Household.	Lodgers per Household.	Rooms.	Rooms per Household.	Rooms per Person.
Under $10	29,036	134,699	4·64	0·13	119,934	4·13	0·89
$10–$15	93,835	423,360	4·51	0·17	411,429	4·38	0·97
16– 24	116,000	541,331	4·67	0·16	568,919	4·90	1·05
25– 39	122,967	560,786	4·56	0·29	694,581	5·65	1·24
40– 59	47,045	190,438	4·05	0·32	323,299	6·87	1·70
$60 or over	16,545	66,142	4·00	0·31	107,587	6·50	1·63
Free tenants	2,131	8,608	4·04	0·16	11,292	5·30	1·31
Rent not specified	2,149	7,885	3·67	0·25	5,262	2·45	0·67
Totals or Averages	**429,708**	**1,933,249**	**4·50**	**0·22**	**2,242,303**	**5·22**	**1·16**

Monthly Rental.	Earners in Families.	Approximate Yearly Earnings of Families.	Yearly Earnings per Person (excluding Lodgers).	Yearly Earnings per Household.	Yearly Earnings of Household per Room.	Monthly Earnings per Household.
	$	$	$	$	$	$
Under $10	35,785	21,471,437	164	739	179	62
$10–$15	117,644	83,252,907	204	887	203	74
16– 24	157,825	135,888,055	260	1,171	239	98
25– 39	177,106	193,071,463	367	1,570	278	131
40– 59	64,205	102,526,926	585	2,179	317	182
$60 or over	21,005	61,421,106	1,007	3,712	571	309
Free tenants	2,679	3,397,277	411	1,594	301	133
Rent not specified	2,573	2.312,794	315	1,076	439	90
Totals or Averages	**578,822**	**603,341,965**	**328**	**1,404**	**269**	**117**

26.—Numbers of Families and Numbers and Percentages of Children Living at Home, by Class and Size of Family, Rural and Urban, Canada, 1931.

Class and Size of Family.	Numbers of Families.		Numbers of Children.		Percentages of Total Children.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Class of Family.						
All families	1,085,781	1,333,579	2,406,411	2,474,639	100·00	100·00
Families of one person	142,682	127,630	–	–	–	–
Families without dependants but with wife or husband	161,655	248,424	–	–	–	–
Families without children but with other dependants	34,515	34,820	–	–	–	–
Families with children only	699,811	877,279	2,406,411	2,474,639	100·00	100·00
Families with children and other dependants	47,118	45,426				

26.—Numbers of Families and Numbers and Percentages of Children Living at Home, by Class and Size of Family, Rural and Urban, Canada, 1931—concluded.

Class and Size of Family.	Numbers of Families.		Numbers of Children.		Percentages of Total Children.	
	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Size of Family.						
All families with children	746,929	922,705	2,406,411	2,474,639	100·00	100·00
Families with 1 child	199,048	304,802	199,048	304,802	8·27	12·32
2 children	164,492	235,873	328,984	471,746	13·67	19·06
3 "	120,132	150,510	360,396	451,530	14·98	18·25
4 "	86,070	92,865	344,280	371,460	14·31	15·01
5 "	60,264	56,537	301,320	282,685	12·52	11·42
6 "	42,234	34,588	253,404	207,528	10·53	8·39
7 "	29,433	21,218	206,031	148,526	8·56	6·00
8 "	19,395	12,481	155,160	99,848	6·45	4·03
9 "	12,261	6,991	110,349	62,919	4·59	2·54
10 "	6,994	3,681	69,940	36,810	2·91	1·49
11 "	3,708	1,837	40,788	20,207	1·69	0·82
12 "	1,682	820	20,184	9,840	0·84	0·40
13 "	725	347	9,425	4,511	0·39	0·18
14 "	328	110	4,592	1,540	0·19	0·06
15 "	116	36	1,740	540	0·07	0·02
16 "	32	6	512	96	0·02	[1]
17 "	12	3	204	51	0·01	[1]
18 " or over	3	Nil	54	Nil	[1]	Nil

[1] Less than one one-hundredth of one per cent.

The fact that there were only 68,228 more children in urban families than in rural is probably the most striking feature of the comparison between the number of children in families of rural and urban areas. At the same time there were 247,798 more urban families than rural, with nearly the same proportion (about 70 p.c.) having some children. When the families of 4 children or less are compared, there are 214,308 more families and 366,830 more children in urban families than in rural. In 80 p.c. of the total number of families with children, the average number of children living at home is larger for urban than rural, although the general average is decidedly lower for urban. This lower average is mainly due to the fact that the proportion of large families is comparatively much greater in rural areas.

In the families with between 1 and 5 children, inclusive (which constitute the majority of all cases), the average urban family has much the larger percentage of children than the rural. This is rather striking since it would seem much easier for the rural family to carry the heavier load. There is no doubt that rural families, considering the actual number of children born, are more prolific. The phenomenon noted above is a matter of the number of children who live at home, not of the number of children born to any family or living away from home.

Section 15.—Occupations of the Canadian People.

An article specially prepared for the Year Book, and analysing comprehensively the occupations of the Canadian people as shown by the 1931 Census, appeared at pp. 128-146 of the 1937 Year Book.

Section 16.—Quinquennial Census of the Prairie Provinces.

The latest census of the Prairie Provinces was that taken as of June 1, 1936. The 1937 edition of the Year Book, at pp. 146-152, showed statistics covering the population of each province, by electoral districts, sex, conjugal condition, age distribution, racial origin, birthplace, and by rural or urban habitation. Unfortunately, at the June 1 enumeration a small area in Saskatchewan with 654 inhabitants was not covered and had to be enumerated later. The 1936 figures as published for Saskatchewan in the 1937 Year Book should therefore be corrected by adding 654 to the total rural population there published. An adjustment is also to be made to the urban population by deducting 98 on account of disorganized urban centres; this is also to be added to the rural. The total difference to the rural population is therefore an addition of 752 and that to the urban a deduction of 98, the net result being an addition to the provincial total of 654. Normally the tables would have been republished in this edition, but the error was not apparent until most of the Year Book had been 'made-up'. In Volumes I and II of the 1936 Census, the figures are published in final form.

As the composition of the population of the three provinces, taken as a unit, cross classified according to racial origin and birthplace, is of general interest, the following table has been specially compiled for the Year Book. It shows the birthplaces of both the rural and urban populations for each of the principal racial strains making up the population of the Prairie Provinces. Of the total population of 2,415,545, the number of persons of British racial origin was 1,189,612 or 49·2 p.c., of whom 1,120,242, or 94 p.c. (46·4 p.c. of the total) were born in Canada or in other British lands. The percentage born in Canada was 75. The population of French origin numbered 137,778, or 5·7 p.c. of the total, the great majority being Canadian-born.

Other important elements in the population are the German, Ukrainian, and Scandinavian racial strains, amounting to 12·8 p.c., 9·4 p.c., and 6·8 p.c., respectively. By place of birth, the population is divided as follows: Canada, 1,648,490, or 68·3 p.c.; other British countries, 275,820, or 11·4 p.c.; U.S.A., 152,908, or 6·3 p.c.; and other foreign countries, 338,327, or 14·0 p.c. From the information presented below, the reader will be able to make further analyses, according to the particular phase of the subject in which he may be interested.

27.—Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birthplace, and Sex, as at June 1, 1936.

Racial Origin.		Born in Canada.		Born in Other British Countries.		Born in the United States.		Born in Other Foreign Countries.	
		Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
British—									
English	M.	108,158	85,101	45,732	46,499	10,913	4,984	179	129
	F.	93.496	90,668	32,557	41,904	8,771	6,164	97	146
Irish	M.	67,164	44,003	7,598	7,940	8,004	3,534	31	30
	F.	53,120	45,717	4,842	6,644	5,822	3,796	14	23
Scottish	M.	72,027	56,671	19,148	21,239	5,394	2,626	43	53
	F.	59,041	58,586	13,210	19,345	3,846	2,836	25	56
Other	M.	3,506	3,106	2,461	2,147	737	339	29	15
	F.	2,944	2,927	1,250	1,491	401	293	24	16
French	M.	46,050	16,617	94	101	3,660	1,310	2,928	947
	F.	39,714	18,086	73	96	3,079	1,897	2,088	1,038
Austrian	M.	3,634	1,432	5	4	126	25	2,665	1,312
	F.	3,199	1,693	Nil	2	88	47	1,590	943
Belgian	M.	2,950	746	3	3	127	24	2,440	867
	F.	2,769	865	4	5	104	32	1,647	738
Czech and Slovak	M.	2,479	936	6	2	410	106	3,277	1,222
	F.	2,189	956	Nil	1	282	129	1,873	698
Dutch	M.	18,203	4,314	26	24	1,891	755	4,186	1,189
	F.	16,606	4,578	24	17	1,472	739	3,001	981
Finnish	M.	1,443	130	1	Nil	294	31	1,214	191
	F.	1,260	226	Nil	"	233	66	764	163
German	M.	78,977	20,771	99	87	14,708	3,419	33,071	10,463
	F.	73,141	24,335	86	69	11,308	4,030	24,448	9,948
Hebrew	M.	533	5,856	23	161	10	233	513	5,834
	F.	444	5,648	17	170	20	269	410	6,078

27.—Rural and Urban Population of the Prairie Provinces, by Racial Origin, Birthplace, and Sex, as at June 1, 1936—concluded.

Racial Origin.		Born in Canada.		Born in Other British Countries.		Born in the United States.		Born in Other Foreign Countries.	
		Rural.	Urban.	Rural.	Urban.	Rural.	Urban.	Rural.	Urban.
Hungarian	M.	4,512	948	4	1	112	28	5,061	1,682
	F.	3,966	1,141	2	1	101	43	3,016	1,148
Italian	M.	920	1,271	10	23	56	57	1,062	1,196
	F.	925	1,376	4	12	43	54	491	716
Polish	M.	18,329	6,225	13	6	441	94	14,460	6,179
	F.	16,638	7,616	5	7	349	161	9,712	4,965
Roumanian	M.	3,709	1,005	2	Nil	34	14	2,023	905
	F.	3,470	1,185	3	2	47	24	1,267	530
Russian	M.	10,136	2,483	13	16	344	104	6,593	2,250
	F.	9,374	2,781	6	14	281	115	4,681	1,715
Scandinavian	M.	34,650	9,848	62	44	12,706	3,064	24,393	6,896
	F.	31,026	11,743	62	50	9,372	3,705	12,258	4,836
Ukrainian	M.	59,767	13,866	18	5	217	78	33,686	12,235
	F.	55,757	16,701	12	14	196	92	24,700	8,698
Other European	M.	1,043	760	9	22	83	38	1,729	1,165
	F.	918	801	12	21	69	56	803	556
Asiatic—									
Chinese and Japanese	M.	213	487	2	3	3	2	868	5,399
	F.	172	389	Nil	3	1	1	78	124
Other	M.	192	316	17	5	12	11	166	208
	F.	219	305	3	2	9	19	66	115
Indian	M.	19,235	220	Nil	Nil	47	8	Nil	Nil
	F.	18,468	266	"	"	47	5	"	"
Unspecified and others	M.	12,023	1,492	16	52	385	317	25	15
	F.	11,016	1,572	14	18	269	210	6	13
Totals	M.	569,853	278,604	75,362	78,384	60,714	21,201	140,642	60,382
	F.	499,872	300,161	52,186	69,888	46,210	24,783	93,059	44,244
Grand Totals		**1,069,725**	**578,765**	**127,548**	**148,272**	**106,924**	**45,984**	**233,701**	**104,626**

Section 17.—Annual Estimates of Population.

While the populations in different countries are actually counted at decennial or quinquennial censuses, annual estimates of populations are required by modern States for many purposes, such as the calculation of birth, death, and marriage rates, and of per capita figures of production, trade, finance, consumption, etc. In different countries various methods of obtaining annual figures of post-censal populations are adopted. For example, it is possible, with good vital statistics and records of arrivals and departures, to obtain the actual population at any particular date with approximate accuracy by the simple method of adding births and arrivals and subtracting deaths and departures during the period elapsed since the census. This method is impracticable for Canada, with 4,000 miles of common boundary line with the United States, crossed in both directions every day by many thousands of people. In almost all civilized countries, the actual methods of making the estimates vary. Thus, the method of arithmetical progression is widely used in estimating the populations in the older countries of the world; this method involves the annual addition to the population of the country and of particular areas within it of one-fifth or one-tenth of the numerical increase in the last quinquennial or decennial intercensal period. In the case of Canada annual figures of population were purely estimates, made on the basis of past increases, prior to the Census of 1931. They have now been worked out on a basis which takes into consideration collateral data back to 1867, and the resulting figures are believed to state the populations at intercensal periods more accurately than any published prior to 1931.

The new method upon which calculations are based was described at pp. 108-109 of the 1932 Year Book.*

28.—Estimates of the Population of Canada, by Provinces, intercensal years, 1900-38.

NOTE.—At every census the previous post-censal data are adjusted to the newly recorded population figure. Figures for 1867-99 will be found at p. 141 of the 1936 Year Book.

(In thousands.)

Year.	Canada.	P.E. Island.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W. Territories.
1900	5,301	103	459	329	1,630	2,172	245	-	-	170	-	193
1901	5,371	103	460	331	1,649	2,183	255	91	73	179	27	20
1902	5,494	101	459	331	1,670	2,194	275	125	96	199	25	19
1903	5,651	100	460	331	1,709	2,217	296	159	119	220	23	17
1904	5,827	99	463	333	1,752	2,246	318	194	142	242	22	16
1905	6,002	99	464	333	1,771	2,289	344	236	166	264	21	15
1906	6,097	96	465	334	1,784	2,299	366	258	185	279	18	13
1907	6,411	96	475	341	1,853	2,365	395	311	236	309	18	12
1908	6,625	95	480	345	1,902	2,412	413	356	266	330	15	11
1909	6,800	94	483	346	1,931	2,444	427	401	301	350	13	10
1910	6,988	94	486	348	1,965	2,482	441	446	336	370	11	9
1911	7,207	94	492	352	2,006	2,527	461	492	374	393	9	7
1912	7,389	94	496	356	2,042	2,572	481	525	400	407	9	7
1913	7,632	94	504	363	2,096	2,639	505	563	429	424	8	7
1914	7,879	95	512	371	2,148	2,705	530	601	459	442	8	8
1915	7,981	94	511	371	2,162	2,724	545	628	480	450	8	8
1916	8,001	92	505	368	2,154	2,713	554	648	496	456	7	8
1917	8,060	90	503	368	2,169	2,724	558	662	508	464	6	8
1918	8,148	89	502	369	2,191	2,744	565	678	522	474	6	8
1919	8,311	89	507	373	2,234	2,789	577	700	541	488	5	8
1920	8,556	89	516	381	2,299	2,863	594	729	565	507	5	8
1921	8,788	89	524	388	2,361	2,934	610	757	588	525	4	8
1922	8,919	89	522	389	2,409	2,980	616	769	592	541	4	8
1923	9,010	87	518	389	2,446	3,013	619	778	593	555	4	8
1924	9,143	86	516	391	2,495	3,059	625	791	597	571	4	8
1925	9,294	86	515	393	2,549	3,111	632	806	602	588	4	8
1926	9,451	87	515	396	2,603	3,164	639	821	608	606	4	8
1927	9,636	87	515	398	2,657	3,219	651	841	633	623	4	8
1928	9,835	88	515	401	2,715	3,278	664	862	658	641	4	9
1929	10,029	88	515	404	2,772	3,334	677	883	684	659	4	9
1930	10,208	88	514	406	2,825	3,386	689	903	708	676	4	9
1931	10,376	88	513	408	2,874	3,432	700	922	732	694	4	9
1932[1]	10,506	89	519	413	2,910	3,475	709	933	740	704	4	10
1933[1]	10,681	89	522	420	2,970	3,564	710	932	748	712	4	10
1934[1]	10,824	89	525	425	3,018	3,629	711	932	756	725	4	10
1935[1]	10,935	89	527	429	3,062	3,673	711	931	764	735	4	10
1936[1]	11,028	92	537	435	3,096	3,690	711	931	772	750	4	10
1937[1]	11,120	93	542	440	3,135	3,711	717	939	778	751	4	10
1938[1]	11,209	94	548	445	3,172	3,731	720	941	783	761	4	10

[1] These estimates are subject to adjustment as later data are made available.

Section 18.—Area and Population of the British Empire.

Statistics of the areas and populations of the territories included in the British Empire in 1931, together with comparative figures of populations for 1921 and 1911, were given in a table on p. 165 of the 1934-35 Year Book.

Section 19.—Area and Population of the World.

Statistics showing the areas and the populations of the various continents, and details of each country, as in 1931, were given in a table on pp. 168-169 of the 1934-35 Year Book.

---

* The table of estimates and the description of the method upon which calculations are based are the work of M. C. MacLean, M.A., F.S.S., Chief of Social Analysis, Dominion Bureau of Statistics.

CHAPTER V.—VITAL STATISTICS.*

The collection of vital statistics commenced in Canada, as in England, with the registration of baptisms, marriages, and burials by the ecclesiastical authorities. These registers, maintained by the priests from the first settlement of the country, have made it possible for the vital statistics of the French colony to be compiled from the year 1610.† The system of registration by the clergy was continued after the cession of the country to the British, and was extended to the newly-formed Protestant congregations of Lower Canada by an Act of 1795, but the registration, particularly of births, among these latter remained seriously defective, both in Lower Canada and in the new province of Upper Canada, the pioneer settlers often going out into the wilds far from the authority of government and the ministrations of religion. An early attempt was made to remedy the situation through the census by including a schedule requesting births and deaths for the preceding year, but the efforts made to secure records of births and deaths at the Censuses of 1851 and 1861 produced most unsatisfactory results. Nevertheless, in spite of the inherent unsoundness of securing, at a point of time in a decennial census, a record of births and deaths occurring over a considerable period of time, this method was followed down to 1911, when the obviously untrustworthy character of the results led to the discarding of the data obtained at the inquiry.

In English-speaking Canada, the earlier scheme of registration of baptisms, burials, and marriages by the clergy was succeeded after Confederation by Acts for the enforcement of registration of births, marriages, and deaths, with the civil authorities. Such Acts were passed in Nova Scotia in 1864, in Ontario in 1869, in British Columbia in 1872, in Manitoba in 1881, in New Brunswick in 1887, and in Prince Edward Island in 1906. The provinces of Saskatchewan and Alberta were not established until 1905 and, until provincial Acts were passed after this date, civil registration in these provinces was governed by ordinances for the Northwest Territories, the first of which was passed in 1888.

The Dominion Government instituted in the early '80's a plan for compiling the annual mortuary statistics of cities of 25,000 population or over, by subsidizing local boards of health to supply the information under special regulations. A beginning was made with the five cities of Montreal, Toronto, Hamilton, Halifax, and Saint John. By 1891 the list had grown to 25, at a time when, in most of the provinces, the only birth and death statistics were those of the municipalities. Upon the organization of provincial bureaus of vital statistics, however, this work was abandoned, though a conference of Dominion and provincial officials, held in 1893, passed a resolution calling upon the provincial and Dominion authorities to co-operate in the work of collecting, compiling, and publishing the vital statistics of the Dominion. This resolution had no immediate practical results in securing accurate or comparable vital statistics.

---

* This chapter has been revised by W. R. Tracey, B.A., Chief, Vital Statistics, Dominion Bureau of Statistics. A list of the publications of this Branch will be found in Chapter XXIX, Sec. 1, under "Population".

† For a summary of the vital statistics of the Roman Catholic population from 1610 to 1883, see the Statistical Year Book of Quebec, 1921, English or French edition, p. 51. For details, by years, of this movement of population, see Vol. V of the Census of Canada, 1871, pp. 160-265, and Vol. IV of the Census of Canada, 1881, pp. 134-145.

The 1912 Commission on Official Statistics recommended that "for the Dominion, now engaged in building up its national unity, it is important that uniform data should render possible to statisticians the institution of true interprovincial and international comparisons. By effective co-operation of the provinces with the Dominion, this object should be capable of attainment without sacrificing the liberty of each province to satisfy its own special statistical requirements". Yet, prior to 1920, it was impossible to compile any satisfactory series of vital statistics figures for Canada as a whole. Among the obstacles to such a national compilation were the inequalities of registration between the provinces, the lack of uniformity in classification and in the method of presentation, the omission in some cases of important data, the choice in some cases of the fiscal instead of the calender year as the unit of time, and the fact that for some of the provinces within comparatively recent years the series of publications was broken, while for New Brunswick no provincial vital statistics at all were published from 1895 until 1920.

Co-operation was finally effected as a consequence of the establishment of the Dominion Bureau of Statistics under the Statistics Act of 1918, which specifically provided that the Bureau should publish an annual report on vital statistics. A scheme was first drawn up in the Bureau and submitted to the various provinces; then Dominion-Provincial conferences on vital statistics were held in June and December, 1918, when final discussions took place.

In 1919, as a result of conference, a plan was devised whereby the Bureau of Statistics and the Registrar General's office in each province would co-operate in producing national vital statistics for the Dominion. Under this national system, while registration of births, marriages, and deaths, is carried out as heretofore by the provincial authorities, the legislation of each province conforms in its essentials to a model bill, prepared by the Dominion Bureau of Statistics, one of the features of which was compulsory registration. The Bureau of Statistics undertakes compilation and tabulation.

Under the scheme outlined above, the vital statistics for all the provinces except Quebec were secured and compiled on a uniform basis for the years 1921 to 1925. The annual reports for these years may be obtained on application to the Dominion Statistician.

Quebec has been included in the registration area as from Jan. 1, 1926, from which date her statistics are on a comparable basis with those of the other provinces. The final reports for 1926 to 1936, including the statistics of all the nine provinces, have appeared and may be procured from the Dominion Statistician, with the exception of the report for 1931, which is out of print.

Two important considerations should be borne in mind by the student who uses either the tables which follow or the detailed reports issued by the Bureau of Statistics for comparative purposes. First, in spite of the improvements of the past decade, registration generally, and the registration of births in particular, is not as yet universally carried out. Secondly, the very considerable differences in the age and sex distribution of the population in different provinces make comparisons of crude birth rates and crude death rates, as among the provinces, unfair and misleading. All rates in this chapter have been recalculated on the basis of the revised estimates of population given on p. 113.

In 1938 the Vital Statistics Branch inaugurated a series of reports, classifying deaths in Canada by place of residence, based upon 1935 figures. The first report of this series has been issued in two parts, Part I containing 4 tables showing: (1) Deaths according to place of residence and place of occurrence, for cities and towns of 5,000 population or over, and for the remaining parts of counties or census divisions; (2) Deaths according to residence and cause of death, by provinces; (3) The same information as in (2), for cities of 40,000 population or over; (4) The same information for places of 5,000 population or over but under 40,000. Part II shows deaths according to residences and causes for counties and census divisions, exclusive of places of 5,000 population or over. This report may be obtained from the Dominion Statistician, at a price of 25 cents for each Part.

The series has been extended to cover live births, stillbirths, and deaths under one year and under one month for the year 1936. This material is now (March, 1939) on press.

Yukon and Northwest Territories.—The vital statistics of Yukon and the Northwest Territories have been collected and compiled since 1924. They are not, however, presented with those of the nine provinces in the tables of this chapter because the figures are not regarded as complete, the details are in many cases not available, and the small and varying population is not known with sufficient accuracy for each year to enable the rates to be calculated. As these territories contain less than 1/700th of the population of Canada, their vital statistics are a negligible factor in the total. Births, marriages, and deaths in Yukon and the Northwest Territories, for the years 1924-37 are summarized in the statement herewith:—

VITAL STATISTICS OF YUKON AND THE NORTHWEST TERRITORIES, 1924-37.

Year.	Yukon.			Northwest Territories.		
	Births.	Marriages.	Deaths.	Births.	Marriages.	Deaths.
1924	31	5	38	95	39	47
1925	22	17	63	57	35	32
1926	27	12	68	75	3	51
1927	29	19	33	126	20	133
1928	30	13	46	222	30	367
1929	35	10	54	133	29	168
1930	45	17	69	232	36	206
1931	40	24	66	141	36	106
1932	44	26	62	195	33	122
1933	58	15	60	179	26	128
1934	44	29	48	203	47	154
1935	58	27	69	231	63	175
1936	38	26	82	229	68	177
1937[1]	74	37	77	210	45	147

[1] Preliminary figures.

The vital statistics of the provinces are taken up in the following order: births, marriages, deaths, and finally natural increase.

Section 1.—Births.

Throughout almost the whole of the civilized world the birth rate has, in the past generation, been on the decline, though the consequent reduction in the rate of natural increase has been partly offset by the synchronous decline in the death rate.

The crude birth rate of England and Wales, for example, was 35·4 per 1,000 population for the average of the decennium 1871-80, 32·5 in 1881-90, and 29·9 in

1891-1900. In 1913 the birth rate was 24·1, and, though it rose to 25·5 in 1920, it has fallen quite rapidly, with minor fluctuations since then to 14·8 in 1936.

Similarly, in France the crude birth rate declined from an average of 25·4 per 1,000 population in the 1870's, 23·9 in the 1880's and 22·2 in the 1890's to 21·4 in 1920, 16·1 in 1934, and 15·0 in 1936. In Germany, again, the crude birth rate was 39·1 in the 1870's, 36·8 in the 1880's, 36·1 in the 1890's, 25·9 in 1920, 17·6 in 1930, and 14·7 in 1933. Since then the rate has recovered to 19·0 in 1936.

In Canada the crude birth rate still stands at a comparatively high figure, being 19·8 per 1,000 in 1937. This, however, is largely due to the influence of Quebec, where the rate, although declining, stood at 24·1 per 1,000 in 1937, as compared with 16·6 per 1,000 in Ontario. In the other provinces the figures varied from a low of 15·0 in British Columbia to a high of 24·0 in New Brunswick.

Birth statistics are given by sex in Table **1**, below. Table **2** gives the number of live births in cities and towns of 10,000 population or over for the years 1933 to 1937, inclusive. For some years previous to 1930 there was a definite tendency for such births to increase, but the figures given indicate an opposite trend since that year.

Births by Place of Residence.—The Vital Statistics Branch of the Dominion Bureau of Statistics has, at the time of going to press, a report in process of compilation showing births by place of residence. See p. 116.

Sex of Live Births.—Table **1** shows the number and proportion of live male and female births reported for each province of Canada during the calendar years 1935, 1936, and 1937, with averages for the five-year periods 1921-25, 1926-30, and 1931-35. The figures for Quebec commence only with the year 1926, when that province entered the registration area, and the totals for Canada are limited in the same manner in consequence. Every province shows an excess of male births for the years or averages shown in the table. The table shows that among every 1,000 born in 1937 in the whole of Canada, 514 were males and 486 females. In other words, there were 1,057 males born to every 1,000 females.

1.—Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, by Provinces, 1935-37, with Averages for 1921-25, 1926-30, and 1931-35.

Note.—For corresponding figures for single years 1921-25, see p. 165 of the Canada Year Book for 1927-28, for those for 1926-30, p. 156 of the Canada Year Book for 1933, and those for 1931-33, p. 156 of the 1936 Year Book.

Province and Year.	Total.	Rate per 1,000 Population.	Males.		Females.		Males to 1,000 Females.
			Number.	Per Cent of Total.	Number.	Per Cent of Total.	
Prince Edward Island....Av. 1921-25	1,966	22·6	993	50·5	973	49·5	1,021
Av. 1926-30	1,734	19·7	898	51·8	836	48·2	1,074
Av. 1931-35	1,961	22·1	1,012	51·6	949	48·4	1,067
1935	2,010	22·6	1,013	50·4	997	49·6	1,016
1936	1,977	21·5	1,044	52·8	933	47·2	1,119
1937	2,093	22·5	1,108	52·9	985	47·1	1,125
Nova Scotia.............Av. 1921-25	12,119	23·4	6,275	51·8	5,844	48·2	1,074
Av. 1926-30	11,016	21·4	5,653	51·3	5,363	48·7	1,054
Av. 1931-35	11,486	22·0	5,906	51·4	5,580	48·6	1,058
1935	11,617	22·0	5,980	51·5	5,637	48·5	1,061
1936	11,808	22·0	6,127	51·9	5,681	48·1	1,079
1937	11,572	21·4	6,071	52·5	5,501	47·5	1,104
New Brunswick..........Av. 1921-25	11,080	28·4	5,708	51·5	5,372	48·5	1,063
Av. 1926-30	10,327	25·8	5,292	51·2	5,035	48·8	1,051
Av. 1931-35	10,440	24·9	5,344	51·2	5,096	48·8	1,049
1935	10,388	24·2	5,257	50·6	5,131	49·4	1,025
1936	10,513	24·2	5,368	51·1	5,145	48·9	1,043
1937	10,580	24·0	5,452	51·5	5,128	48·5	1,063

1.—Births (Exclusive of Stillbirths) by Sex, and Ratio of Males to Females, by Provinces, 1935-37, with Averages for 1921-25, 1926-30, and 1931-35—concluded.

Province and Year.	Total.	Rate per 1,000 Population.	Males.		Females.		Males to 1,000 Females.
			Number.	Per Cent of Total.	Number.	Per Cent of Total.	
Quebec[1] Av. 1926-30	82,771	30·5	42,644	51·5	40,127	48·5	1,063
Av. 1931-35	78,889	26·6	40,466	51·3	38,423	48·7	1,053
1935	75,267	24·6	38,444	51·1	36,823	48·9	1,044
1936	75,285	24·3	38,578	51·2	36,707	48·8	1,051
1937	75,635	24·1	38,985	51·5	36,650	48·5	1,064
Ontario Av. 1921-25	71,454	23·7	36,725	51·4	34,729	48·6	1,057
Av. 1926-30	68,703	21·0	35,268	51·3	33,435	48·7	1,055
Av. 1931-35	65,000	18·3	33,324	51·3	31,676	48·7	1,052
1935	63,069	17·2	32,367	51·3	30,702	48·7	1,054
1936	62,451	16·9	32,124	51·4	30,327	48·6	1,059
1937	61,645	16·6	31,655	51·4	29,990	48·6	1,056
Manitoba Av. 1921-25	16,590	26·8	8,443	50·9	8,147	49·1	1,036
Av. 1926-30	14,391	21·7	7,399	51·4	6,992	48·6	1,058
Av. 1931-35	13,690	19·3	7,005	51·2	6,685	48·8	1,048
1935	13,335	18·8	6,770	50·8	6,565	49·2	1,031
1936	12,855	18·1	6,670	51·9	6,185	48·1	1,078
1937	12,888	18·0	6,594	51·2	6,294	48·8	1,048
Saskatchewan Av. 1921-25	21,580	27·7	11,119	51·5	10,461	48·5	1,063
Av. 1926-30	21,298	24·7	10,979	51·5	10,319	48·5	1,064
Av. 1931-35	20,325	21·9	10,444	51·4	9,881	48·6	1,057
1935	19,569	21·0	10,063	51·4	9,506	48·6	1,059
1936	19,125	20·5	9,839	51·4	9,286	48·6	1,060
1937	18,640	19·9	9,526	51·1	9,114	48·9	1,045
Alberta Av. 1921-25	15,461	26·0	7,887	51·0	7,574	49·0	1,041
Av. 1926-30	15,924	24·2	8,153	51·2	7,771	48·8	1,049
Av. 1931-35	16,556	22·1	8,505	51·4	8,051	48·6	1,056
1935	16,183	21·2	8,309	51·3	7,874	48·7	1,055
1936	15,786	20·4	8,081	51·2	7,705	48·8	1,049
1937	15,903	20·4	8,027	50·5	7,876	49·5	1,019
British Columbia Av. 1921-25	10,256	18·4	5,310	51·8	4,946	48·2	1,074
Av. 1926-30	10,356	16·2	5,266	50·8	5,090	49·2	1,035
Av. 1931-35	10,005	14·0	5,136	51·3	4,869	48·7	1,055
1935	10,013	13·6	5,090	50·8	4,923	49·2	1,034
1936	10,571	14·1	5,458	51·6	5,113	48·4	1,067
1937	11,279	15·0	5,725	50·8	5,554	49·2	1,031
Canada[1] (Exclusive of the Territories) Av. 1926-30	**236,520**	**24·1**	**121,552**	**51·4**	**114,968**	**48·6**	**1,057**
Av. 1931-35	**228,352**	**21·4**	**117,142**	**51·3**	**111,210**	**48·7**	**1,053**
1935	**221,451**	**20·3**	**113,293**	**51·2**	**108,158**	**48·8**	**1,047**
1936	**220,371**	**20·0**	**113,289**	**51·4**	**107,082**	**48·6**	**1,058**
1937	**220,235**	**19·8**	**113,143**	**51·4**	**107,092**	**48·6**	**1,057**

---

[1] Quebec was not included in the registration area prior to 1926.

2.—Live Births in Cities and Towns of 10,000 Population or Over, 1933-37, with Averages, 1926-30 and 1931-35.

Province and City or Town.	Census Population, 1931.	Averages, 1926-30.	Averages, 1931-35.	1933.	1934.	1935.	1936.	1937.
P. E. Island—								
Charlottetown	12,361	287	361	337	358	350	405	398
Nova Scotia—								
Glace Bay	20,706	672	702	602	715	779	803	823
Halifax	59,275	1,457	1,629	1,591	1,607	1,679	1,755	1,631
Sydney	23,089	511	586	512	588	589	602	573
New Brunswick—								
Moncton	20,689	518	494	463	480	459	487	493
Saint John	47,514	1,144	1,203	1,127	1,211	1,164	1,223	1,216

2.—Live Births in Cities and Towns of 10,000 Population or Over, 1933-37, with Averages, 1926-30 and 1931-35—concluded.

Province and City or Town.	Census Population, 1931.	Averages, 1926-30.	Averages, 1931-35.	1933.	1934.	1935.	1936.	1937.
Quebec—								
Chicoutimi	11,877	553	508	499	486	508	504	515
Granby	10,587	298	354	348	348	308	300	317
Hull	29,433	1,001	875	852	853	810	822	815
Joliette	10,765	347	329	334	285	332	289	280
Lachine	18,630	442	398	373	368	348	355	387
Lévis	11,724	307	261	261	242	232	212	242
Montreal	818,577	20,205	19,002	18,449	18,463	17,786	17,369	17,732
Outremont	28,641	124	95	94	82	84	68	50
Quebec	130,594	4,379	4,137	4,049	4,017	3,871	3,834	3,917
St. Hyacinthe	13,448	333	352	339	331	356	379	410
St. Jean	11,256	324	295	278	296	275	307	293
Shawinigan Falls	15,345	658	570	559	530	511	529	485
Sherbrooke	28,933	786	753	730	728	740	783	792
Sorel	10,320	297	265	246	248	236	240	227
Thetford Mines	10,701	465	351	305	364	293	294	337
Three Rivers	35,450	1,329	1,187	1,050	1,196	1,129	1,121	1,078
Valleyfield	11,411	317	358	326	367	357	344	337
Verdun	60,745	1,057	1,021	1,003	925	851	891	828
Westmount	24,235	110	313	305	312	267	208	245
Ontario—								
Belleville	13,790	370	376	349	367	377	430	381
Brantford	30,107	682	627	630	575	601	666	606
Chatham	14,569	485	484	468	506	528	578	673
Cornwall	11,126	468	482	465	434	600	563	581
Fort William	26,277	635	558	535	474	530	485	503
Galt	14,006	277	296	282	289	278	267	295
Guelph	21,075	395	351	356	327	341	299	296
Hamilton	155,547	3,041	2,957	2,864	2,730	2,763	2,758	2,768
Kingston	23,439	595	657	685	609	687	674	724
Kitchener	30,793	754	752	693	727	759	743	733
London	71,148	1,381	1,379	1,281	1,337	1,426	1,410	1,472
Niagara Falls	19,046	466	421	398	405	437	384	406
North Bay	15,528	417	390	387	368	390	393	385
Oshawa	23,439	645	525	469	510	523	524	534
Ottawa	126,872	2,965	2,960	2,873	2,824	3,040	3,028	2,983
Owen Sound	12,839	334	319	316	323	320	327	326
Peterborough	22,327	579	577	567	545	571	621	628
Port Arthur	19,818	542	511	518	477	524	541	566
St. Catharines	24,753	596	589	573	605	548	577	571
St. Thomas	15,430	326	296	258	323	297	291	296
Sarnia	18,191	431	413	378	400	424	433	418
Sault Ste. Marie	23,082	613	574	564	493	532	554	522
Stratford	17,742	384	340	307	320	350	348	370
Sudbury	18,518	498	797	717	767	876	979	1,165
Timmins	14,200	491	563	545	590	631	687	812
Toronto	631,207	12,210	11,436	11,286	10,615	10,474	10,391	9,942
Welland	10,709	288	286	292	254	308	313	310
Windsor[1]	98,179	2,791	2,037	1,923	1,901	2,032	2,111	2,012
Woodstock	11,395	246	237	246	214	224	236	273
Manitoba—								
Brandon	16,461[2]	390	303	297	270	264	250	268
St. Boniface	16,275[2]	843	1,064	1,028	1,024	1,104	1,129	1,122
Winnipeg	215,814[2]	4,527	3,944	3,786	3,728	3,668	3,559	3,673
Saskatchewan—								
Moose Jaw	19,805[2]	623	464	463	426	427	450	477
Prince Albert	11,049[2]	334	398	363	438	469	435	493
Regina	53,354[2]	1,368	1,270	1,174	1,231	1,172	1,145	1,353
Saskatoon	41,734[2]	1,058	955	892	857	872	886	866
Alberta—								
Calgary	83,407[2]	1,806	1,695	1,624	1,601	1,640	1,623	1,638
Edmonton	85,774[2]	2,122	2,246	2,085	2,148	2,278	2,317	2,606
Lethbridge	13,523[2]	436	531	517	458	582	580	590
British Columbia—								
New Westminster	17,524	525	558	535	544	558	639	758
Vancouver	246,593	3,776	3,357	3,188	3,179	3,248	3,410	3,780
Victoria	39,082	717	696	674	714	709	710	758

---

[1] Includes East Windsor, Sandwich, and Walkerville.

[2] Census of 1936.

Nativity of Mothers.—Table 3 shows, by provinces, the percentages of legitimate children born alive to Canadian-born, British-born, and foreign-born mothers, respectively, for the years 1935, 1936, and 1937. The influence of the limited immigration in recent years is reflected in the figures. In the Prairie Provinces of Manitoba, Saskatchewan, and Alberta, where the percentages born to foreign-born mothers in 1933 were 25·9, 36·3, and 40·4, respectively, they were 18·0, 25·7, and 30·0, respectively, in 1937. Thus more and more of the children of the West are coming within the class of third generation Canadian.

3.—Percentages of Legitimate Children Born Alive to Canadian-Born, British-Born, or Foreign-Born Mothers, by Provinces, 1935-37.

Province.	Nativity of Mothers.								
	Canadian Born.			British Born.			Foreign Born.		
	1935.	1936.	1937.	1935.	1936.	1937.	1935.	1936.	1937.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island.....	94·2	94·3	94·5	1·4	1·5	1·6	4·4	4·1	3·8
Nova Scotia..............	88·4	89·2	90·7	8·0	7·4	6·4	3·6	3·3	2·9
New Brunswick...........	93·8	93·7	94·3	2·5	2·5	2·3	3·7	3·8	3·5
Quebec..................	94·7	95·3	95·6	2·0	1·8	1·7	3·3	2·9	2·7
Ontario..................	76·2	77·8	79·8	14·0	12·9	11·5	9·8	9·3	8·8
Manitoba.................	69·0	71·6	75·3	9·2	8·0	6·7	21·8	20·4	18·0
Saskatchewan............	62·2	64·8	68·6	7·4	6·6	5·8	30·5	28·6	25·7
Alberta...................	54·8	58·1	60·9	10·6	9·9	9·1	34·6	32·0	30·0
British Columbia.........	58·4	63·1	66·5	20·5	18·3	15·9	21·1	18·6	17·6
Canada[1]..........	**80·1**	**81·7**	**83·4**	**8·1**	**7·4**	**6·6**	**11·8**	**10·9**	**10·0**

[1] Exclusive of the Territories.

Fertility Rates.—The crude birth rate of a young country is subject to influences which vitiate comparison with older lands. These influences are the result, to some extent, of differences in age or sex constitution or in conjugal condition. For this reason birth rates are frequently based on the number of births per thousand women within suitably chosen age-groups. Such rates are commonly known as fertility rates. At pp. 150-152 of the 1936 Year Book specific fertility rates of married women between the ages of 15 and 49 years were given, by provinces, for 1921, 1922, and 1930-32. Such statistics will not again be compiled until 1941 census data are available, and the interested reader is referred to that table for this information.

Multiple Births in Canada.—During the twelve-year period 1926-37, out of a total of 2,811,630 recorded confinements, 33,938 or 1 in 82·8 were multiple confinements. Of these 33,599 were twin and 337 were triplet confinements, while one, in British Columbia in 1931, was a quadruplet confinement from which all the children died within a few hours of birth. The remaining multiple confinement resulted in the birth of the Dionne quintuplets (May 28, 1934).

Table 4 shows the incidence of multiple births in each year from 1933 to 1937. In 1937 one in every 86 confinements was a twin confinement, a proportion which is fairly representative for the other years as well. There were only 23 triplet confinements in 1937. Of the children born alive or dead one in every 43 was the product of a multiple confinement. For children born alive the proportion was one in 44 and for children stillborn one in 20. In the multiple confinements stillborn children formed 6·0 p.c. of the total births as against 2·7 p.c. in single confinements.

4.—Live Births and Stillbirths Classified as Single and Multiple, by Sex, 1933-37.

NOTE.—For statistics from 1926 to 1932, see p. 162 of the 1938 Year Book.

Year and Sex.	Total Births.		Single Births.		Twins.			Triplets.		
						Children.			Children.	
	Born Alive.	Still-born.	Born Alive.	Still-born.	No.	Born Alive.	Still-born.	No.	Born Alive.	Still-born.
1933—										
Total..........	222,868	6,848	217,812	6,510	2,655	4,979	331	28	77	7
Male.........	114,388	3,887	111,807	3,695	-	2,537	191	-	44	1
Female......	108,480	2,961	106,005	2,815	-	2,442	140	-	33	6
1934—										
Total..........	221,303[1]	6,452	216,230	6,150	2,658	5,018	298	18	50	4
Male.........	113,323	3,636	110,776	3,470	-	2,525	165	-	22	1
Female......	107,980[1]	2,816	105,454	2,680	-	2,493	133	-	28	3
1935—										
Total..........	221,451	6,449	216,482	6,136	2,590	4,872	308	34	97	5
Male.........	113,293	3,646	110,763	3,468	-	2,473	175	-	57	3
Female......	108,158	2,803	105,719	2,668	-	2,399	133	-	40	2
1936—										
Total..........	220,371	6,350	215,377	6,051	2,600	4,913	287	31	81	12
Male.........	113,289	3,605	110,722	3,433	-	2,528	162	-	39	10
Female......	107,082	2,745	104,655	2,618	-	2,385	125	-	42	2
1937—										
Total..........	220,235[2]	6,275	215,276	5,959	2,599	4,890	308	23	61	8
Male.........	113,143[2]	3,573	110,632	3,392	-	2,477	180	-	29	1
Female......	107,092[2]	2,702	104,644	2,567	-	2,413	128	-	32	7

[1] Including Dionne quintuplets, all females, born alive. [2] Including two sets of quadruplets, all born alive (five males and three females).

Ages of Parents.—Table 5 shows the age distribution of married fathers and mothers in 1926 (the first year for which the figures are available for the whole of Canada) and for the years 1934-36. The fathers and mothers in each of these years are arranged according to age and then divided into four equal groups. Each point of age at which a separation comes is called a quartile. To obtain these points of age it is assumed that those in the same year of age are evenly distributed from its lower to its upper limit. In similar manner the deciles divide fathers or mothers in each year into ten equal groups.

In 1936 one-quarter of the married fathers were under 27·89 years of age, one-half under 32·50 years and three-quarters under 38·39 years. One-quarter of the married mothers were under 24·10 years of age, one-half under 28·37 years and three-quarters under 33·60 years. Nine-tenths of the fathers were under 44·09 years and nine-tenths of the mothers under 38·25 years. It will be noted that in every case for fathers, the 1926 figure is appreciably greater than that for 1936. In other words, parents, generally speaking, are somewhat younger than in 1926, although for brief intervening periods the trend has been reversed.

5.—Quartile and Decile Ages of Married Fathers and Mothers, in Canada, 1926, and 1934-36.

Position in Array, by Age.	Fathers.				Mothers.			
	1926.	1934.	1935.	1936.	1926.	1934.	1935.	1936.
	Years.	Years.	Years.	Years.	Years.	Years.	Years.	Years.
First quartiles	28·35	28·04	27·99	27·89	24·43	24·22	24·12	24·10
Second quartiles	33·31	32·78	32·62	32·50	28·89	28·52	28·41	28·37
Third quartiles	39·01	38·72	38·56	38·39	34·26	33·91	33·71	33·60
First deciles	24·91	24·74	24·72	24·67	21·41	21·29	21·25	21·26
Second deciles	27·28	27·04	27·01	26·91	23·50	23·32	23·24	23·22
Third deciles	29·35	28·95	28·88	28·79	25·34	25·07	24·99	24·94
Fourth deciles	31·28	30·76	30·67	30·58	27·79	26·78	26·68	26·64
Fifth deciles	33·31	32·78	32·62	32·50	28·89	28·52	28·41	28·37
Sixth deciles	35·48	34·81	34·77	34·60	30·82	30·39	30·26	30·21
Seventh deciles	37·81	37·35	37·16	36·92	33·41	32·66	32·47	32·40
Eighth deciles	40·40	40·22	40·07	39·96	35·61	35·17	35·08	34·99
Ninth deciles	44·19	44·33	44·22	44·09	38·69	38·51	38·36	38·25

Birthplaces of Parents.—Table 6 classifies the children born in 1926, 1936, and 1937 by country of birth of parents, and furnishes some idea to what extent the coming generation of Canadian born will be the offspring of Canadian-born, British-born, or foreign-born parents. The term "country not specified", under country of birth, includes for the father illegitimate births and births of incomplete record, while for the mother it includes births of incomplete record only. Between 1926 and 1937 the percentage of births for which both parents were born in Canada rose from 61·4 in 1926 to 67·8 and 69·5 for 1936 and 1937, respectively.

6.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers Born in Specified Countries, 1926, 1936, and 1937.

Note.—Comparable statistics for earlier years, from 1926, will be found in previous Year Books commencing with the 1929 edition.

Country of Birth of Parents.	Numbers of Births with Father, Mother, or Both Parents Born in Specified Country.			Percentages of Births with Father, Mother, or Both Parents Born in Specified Country.		
	Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
Canada 1926	**159,438**	**166,999**	**142,882**	**68·5**	**71·8**	**61·4**
1936	**162,127**	**179,757**	**149,410**	**73·6**	**81·6**	**67·8**
1937	**165,064**	**183,253**	**153,089**	**74·9**	**83·2**	**69·5**
England 1926	18,304	18,808	9,658	7·9	8·1	4·1
1936	11,382	9,008	3,176	5·2	4·1	1·4
1937	10,589	7,966	2,627	4·8	3·6	1·2
Ireland 1926	2,540	2,195	873	1·1	0·9	0·4
1936	1,995	1,466	531	0·9	0·7	0·2
1937	1,914	1,349	448	0·9	0·6	0·2
Scotland 1926	6,635	7,165	3,318	2·9	3·1	1·4
1936	4,611	4,074	1,284	2·1	1·8	0·6
1937	4,213	3,670	1,087	1·9	1·7	0·5
Wales 1926	546	508	105	0·2	0·2	[1]
1936	455	351	60	0·2	0·2	[1]
1937	467	304	63	0·2	0·1	[1]
Other British Isles 1926	100	90	23	[1]	[1]	[1]
1936	59	35	5	[1]	[1]	[1]
1937	54	31	6	[1]	[1]	[1]

For footnotes, see end of table, p. 123.

6.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers Born in Specified Countries, 1926, 1936, and 1937—concluded.

Country of Birth of Parents.		Numbers of Births with Father, Mother, or Both Parents Born in Specified Country.			Percentages of Births with Father, Mother, or Both Parents Born in Specified Country.		
		Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
Newfoundland	1926	1,001	1,051	515	0·4	0·5	0·2
	1936	846	802	319	0·4	0·4	0·1
	1937	741	720	259	0·3	0·3	0·1
Other British Empire	1926	524	413	134	0·2	0·2	0·1
	1936	391	324	113	0·2	0·1	0·1
	1937	378	247	77	0·2	0·1	[1]
Austria	1926	3,473	2,938	2,371	1·5	1·3	1·0
	1936	1,898	1,182	837	0·9	0·5	0·4
	1937	1,773	1,063	741	0·8	0·5	0·3
Belgium	1926	531	472	307	0·2	0·2	0·1
	1936	439	307	178	0·2	0·1	0·1
	1937	386	276	139	0·2	0·1	0·1
Finland	1926	458	471	364	0·2	0·2	0·2
	1936	411	428	276	0·2	0·2	0·1
	1937	363	383	228	0·2	0·2	0·1
France	1926	512	464	194	0·2	0·2	0·1
	1936	284	217	63	0·1	0·1	[1]
	1937	275	181	59	0·1	0·1	[1]
Germany	1926	711	635	255	0·3	0·3	0·1
	1936	1,013	678	328	0·5	0·3	0·1
	1937	969	623	282	0·4	0·3	0·1
Hungary	1926	512	460	358	0·2	0·2	0·2
	1936	809	673	553	0·4	0·3	0·3
	1937	829	646	532	0·4	0·3	0·2
Italy	1926	2,599	1,946	1,870	1·1	0·8	0·8
	1936	1,464	868	780	0·7	0·4	0·4
	1937	1,375	808	709	0·6	0·4	0·3
Norway	1926	840	618	346	0·4	0·3	0·1
	1936	746	394	205	0·3	0·2	0·1
	1937	671	346	175	0·3	0·2	0·1
Poland	1926	4,249	3,714	3,053	1·8	1·6	1·3
	1936	4,802	3,987	2,989	2·2	1·8	1·4
	1937	4,475	3,567	2,676	2·0	1·6	1·2
Russia[2]	1926	5,443	4,620	3,665	2·3	2·0	1·6
	1936	3,944	2,968	2,069	1·8	1·3	0·9
	1937	3,596	2,691	1,777	1·6	1·2	0·8
Sweden	1926	876	666	387	0·4	0·3	0·2
	1936	749	307	136	0·3	0·1	0·1
	1937	673	291	131	0·3	0·1	0·1
Other European countries	1926	3,474	2,556	1,909	1·5	1·1	0·8
	1936	3,548	2,307	1,689	1·6	1·0	0·8
	1937	3,505	2,246	1,645	1·6	1·0	0·7
China and Japan	1926	1,117	1,052	1,018	0·5	0·5	0·4
	1936	700	495	450	0·3	0·2	0·2
	1937	663	445	386	0·3	0·2	0·2
Other Asiatic countries	1926	362	285	250	0·2	0·1	0·1
	1936	183	89	72	0·1	[1]	[1]
	1937	171	109	86	0·1	[1]	[1]
United States	1926	11,940	13,394	4,096	5·1	5·8	1·8
	1936	8,647	8,531	2,138	3·9	3·9	1·0
	1937	8,267	7,893	1,939	3·8	3·6	0·9
Country not specified	1926	6,565	1,230	204	2·8	0·5	0·1
	1936	8,868	1,123	82	4·0	0·5	[1]
	1937	8,824	1,127	97	4·0	0·5	[1]
Totals	**1926**	**232,750**	**232,750**	**178,155**[3]	**100·0**	**100·0**	**76·5**[4]
	1936	**220,371**	**220,371**	**167,743**[3]	**100·0**	**100·0**	**76·1**[4]
	1937	**220,235**	**220,235**	**169,258**[3]	**100·0**	**100·0**	**76·9**[4]

---

[1] Less than one-tenth of one per cent. [2] Includes the Ukraine. [3] This figure gives the number of children whose fathers and mothers were born in the same country. The difference between this figure and the total number of births represents the number of children whose fathers and mothers were born in different countries. [4] This excludes the percentage of "mixed parentage", *i.e.*, where the two parents were not born in the same country.

Origins of Parents.—Table 7 gives the numbers and percentages of births during 1926, 1936, and 1937, distributed by the principal origins.

7.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1926, 1936, and 1937.

Note.—Comparable statistics for earlier years, from 1926, will be found in previous Year Books, commencing with the 1929 edition.

Origin of Parents.	Numbers of Births with Father, Mother, or Both Parents of Specified Origin.			Percentages of Births with Father, Mother, or Both Parents of Specified Origin.		
	Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
English 1926	52,854	55,908	38,445	22·7	34·0	16·5
1936	44,114	46,857	28,277	20·0	21·3	12·8
1937	44,061	46,540	27,952	20·0	21·1	12·7
Irish 1926	21,136	20,071	9,409	9·1	8·6	4·0
1936	20,108	19,608	7,789	9·1	8·9	3·5
1937	19,691	19,257	7,394	8·9	8·7	3·4
Scottish 1926	23,120	23,285	11,158	9·9	10·0	4·8
1936	20,219	20,300	7,819	9·2	9·2	3·5
1937	20,029	20,241	7,678	9·1	9·2	3·5
Welsh 1926	858	711	129	0·4	0·3	0·1
1936	942	732	84	0·4	0·3	[1]
1937	898	739	88	0·4	0·3	[1]
French 1926	89,400	92,425	85,139	38·4	39·7	36·6
1936	83,545	87,169	78,665	37·9	39·6	35·7
1937	83,958	87,591	78,914	38·1	39·8	35·8
German 1926	9,497	10,047	6,951	4·1	4·3	3·0
1936	11,253	11,983	7,534	5·1	5·4	3·4
1937	11,440	12,178	7,546	5·2	5·5	3·4
Armenian 1926	76	72	69	[1]	[1]	[1]
1936	33	23	20	[1]	[1]	[1]
1937	47	36	35	[1]	[1]	[1]
Austrian 1926	1,629	1,778	1,393	0·7	0·8	0·6
1936	578	591	295	0·3	0·3	0·1
1937	627	579	307	0·3	0·3	0·1
Belgian 1926	571	581	361	0·2	0·2	0·2
1936	588	565	270	0·3	0·3	0·1
1937	547	532	239	0·2	0·2	0·1
Bulgarian 1926	74	32	26	[1]	[1]	[1]
1936	45	28	19	[1]	[1]	[1]
1937	40	26	18	[1]	[1]	[1]
Chinese 1926	336	310	309	0·1	0·1	0·1
1936	206	169	163	0·1	0·1	0·1
1937	228	177	169	0·1	0·1	0·1
Czech and Slovak 1926	325	368	232	0·1	0·2	0·1
1936	757	753	562	0·3	0·3	0·3
1937	812	793	609	0·4	0·4	0·3
Danish 1926	491	409	159	0·2	0·2	0·1
1936	788	547	237	0·4	0·2	0·1
1937	778	533	200	0·4	0·2	0·1
Dutch 1926	1,933	1,890	927	0·8	0·8	0·4
1936	2,644	2,608	1,314	1·2	1·2	0·6
1937	2,655	2,577	1,318	1·2	1·2	0·6
Finnish 1926	498	586	449	0·2	0·3	0·2
1936	541	734	443	0·2	0·3	0·2
1937	497	688	366	0·2	0·3	0·2
Greek 1926	290	171	167	0·1	0·1	0·1
1936	192	124	104	0·1	0·1	[1]
1937	196	132	108	0·1	0·1	[1]
Hebrew 1926	2,043	2,023	1,977	0·9	0·9	0·8
1936	2,132	2,120	2,045	1·0	1·0	0·9
1937	2,050	2,046	1,965	0·9	0·9	0·9
Hindu 1926	22	20	20	[1]	[1]	[1]
1936	50	50	49	[1]	[1]	[1]
1937	45	43	41	[1]	[1]	[1]
Hungarian 1926	474	514	410	0·2	0·2	0·2
1936	914	938	742	0·4	0·4	0·3
1937	961	955	748	0·4	0·4	0·3
Icelandic 1926	363	427	264	0·2	0·2	0·1
1936	362	377	181	0·2	0·2	0·1
1937	401	345	173	0·2	0·2	0·1
Indian 1926	2,162	2,499	2,040	0·9	1·1	0·9
1936	3,508	4,136	3,355	1·6	1·9	1·5
1937	3,694	4,303	3,492	1·7	2·0	1·6

For footnotes, see end of table, p. 125.

7.—Numbers and Percentages of Births (Exclusive of Stillbirths) in Canada to Fathers and Mothers of Specified Origins, 1926, 1936, and 1937—concluded.

Origin of Parents.	Numbers of Births with Father, Mother, or Both Parents of Specified Origin.			Percentages of Births with Father, Mother, or Both Parents of Specified Origin.		
	Father.	Mother.	Both Parents.	Father.	Mother.	Both Parents.
Italian 1926	2,799	2,379	2,239	1·2	1·0	1·0
1936	2,023	1,734	1,387	0·9	0·8	0·6
1937	1,985	1,751	1,349	0·9	0·8	0·6
Japanese 1926	800	793	790	0·3	0·3	0·3
1936	573	571	568	0·3	0·3	0·3
1937	518	516	514	0·2	0·2	0·2
Negro 1926	350	382	312	0·2	0·2	0·1
1936	388	452	342	0·2	0·2	0·2
1937	391	457	351	0·2	0·2	0·2
Norwegian 1926	1,696	1,789	911	0·7	0·8	0·4
1936	1,786	1,887	668	0·8	0·9	0·3
1937	1,818	1,870	620	0·8	0·8	0·3
Polish 1926	1,988	2,172	1,487	0·9	0·9	0·6
1936	2,789	3,184	1,926	1·3	1·4	0·9
1937	2,749	3,039	1,822	1·2	1·4	0·8
Roumanian 1926	707	601	479	0·3	0·3	0·2
1936	449	417	242	0·2	0·2	0·1
1937	440	433	246	0·2	0·2	0·1
Russian 1926	2,210	2,041	1,636	0·9	0·9	0·7
1936	1,339	1,247	841	0·6	0·6	0·4
1937	1,261	1,298	834	0·6	0·6	0·4
Serbo-Croatian 1926	208	185	168	0·1	0·1	0·1
1936	417	369	316	0·2	0·2	0·1
1937	386	351	284	0·2	0·2	0·1
Swedish 1926	1,370	1,389	633	0·6	0·6	0·3
1936	1,492	1,377	420	0·7	0·6	0·2
1937	1,534	1,394	409	0·7	0·6	0·2
Swiss 1926	269	215	91	0·1	0·1	[1]
1936	279	203	43	0·1	0·1	[1]
1937	253	190	52	0·1	0·1	[1]
Syrian 1926	284	219	203	0·1	0·1	0·1
1936	214	167	125	0·1	0·1	0·1
1937	188	158	112	0·1	0·1	0·1
Ukrainian[2] 1926	5,072	5,255	4,665	2·2	2·3	2·0
1936	5,842	6,731	5,164	2·7	3·1	2·3
1937	5,776	6,777	5,057	2·6	3·1	2·3
Other 1926	210	165	96	0·1	0·1	[1]
1936	249	260	125	0·1	0·1	0·1
1937	274	256	129	0·1	0·1	0·1
Origin not specified 1926	6,635	1,038	321	2·9	0·4	0·1
1936	9,012	1,360	217	4·1	0·6	0·1
1937	9,007	1,434	280	4·1	0·7	0·1
Totals 1926	**232,750**	**232,750**	**174,065**[3]	**100·0**	**100·0**	**74·8**[4]
1936	**220,371**	**220,371**	**152,351**[3]	**100·0**	**100·0**	**69·1**[4]
1937	**220,235**	**220,235**	**151,419**[3]	**100·0**	**100·0**	**68·8**[4]

[1] Less than one-tenth of one per cent. [2] Including "Galician" and "Bukovinian". [3] This figure gives the number of children whose fathers and mothers have the same origin. The difference between this figure and the total number of births represents the number of children whose fathers and mothers are of different origins. [4] This excludes the percentage of "mixed parentage", *i.e.*, parents not of the same origin.

Illegitimacy.—The ratio of illegitimate to total births is, generally speaking, low in Canada as compared with other countries. The steady increase which is noticeable in recent years is probably due, in some measure, to more complete data.

Out of 220,371 live births in the nine provinces of Canada in 1936, 8,633, or 3·92 p.c., were returned as the issue of unmarried mothers. Figures for 1937 show a total of 220,235 live births, of which 8,574, or 3·89 p.c., were returned as the issue of unmarried mothers. Out of this number, 4,398 were males and 4,176 females—a ratio of 1,053 males to every 1,000 females, as compared with 1,085 males per 1,000 females in 1936, and a general 1937 rate for all live births of 1,057 males to 1,000 females. (See Table 8.)

8.—Numbers of Illegitimate Births, Classified by Age of Mother, by Provinces, 1937, Percentages to Total Live Births, and Totals of Illegitimate Births, by Sex, 1935, 1936, and 1937, with Averages or Totals, 1926-37.

Item.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
1937.										
Under 15 years	Nil	5	6	5	17	4	5	3	6	51
15-19 years	18	257	137	431	881	146	215	191	119	2,395
20-24 years	31	271	146	574	1,029	189	267	252	167	2,926
25-29 years	12	84	45	195	444	79	105	100	71	1,135
30-34 years	Nil	46	24	68	229	27	37	41	37	509
35-39 years	2	21	15	28	127	22	12	22	20	269
40-44 years	Nil	7	7	9	44	9	7	13	12	108
45 years or over	"	Nil	Nil	1	5	2	3	2	2	15
Not given	"	2	1	1,140	20	Nil	Nil	2	1	1,166
Av. 1926-30	**42**	**558**	**299**	**2,334**	**2,196**	**501**	**489**	**479**	**240**	**7,138**
Av. 1931-35	**74**	**652**	**373**	**2,431**	**2,707**	**501**	**651**	**613**	**330**	**8,332**
Totals—										
1935	**83**	**663**	**403**	**2,506**	**2,642**	**473**	**640**	**614**	**320**	**8,344**
1936	**68**	**723**	**405**	**2,469**	**2,788**	**493**	**703**	**607**	**377**	**8,633**
1937	**63**	**693**	**381**	**2,451**	**2,796**	**478**	**651**	**626**	**435**	**8,574**
Percentages of Illegitimate to All Live Births—	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1935	4·1	5·7	3·9	3·3	4·2	3·5	3·3	3·8	3·2	3·77
1936	3·4	6·1	3·9	3·3	4·5	3·8	3·7	3·8	3·6	3·92
1937	3·0	6·0	3·6	3·2	4·5	3·7	3·5	3·9	3·9	3·89
Male Illegitimate Births—	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1935	37	341	218	1,298	1,368	237	329	314	169	4,311
1936	36	394	198	1,302	1,446	248	375	304	189	4,492
1937	27	372	218	1,259	1,424	242	320	311	225	4,398
Female Illegitimate Births—										
1935	46	322	185	1,208	1,274	236	311	300	151	4,033
1936	32	329	207	1,167	1,342	245	328	303	188	4,141
1937	36	321	163	1,192	1,372	236	331	315	210	4,176

[1] Exclusive of the Territories.

Stillbirths.—Statistics of the number of children born dead in 1937 are shown below for Canada, according to the status and age of the mother. Stillbirths to unmarried mothers were 3·7 p.c. of total illegitimate births in 1937, whereas total stillbirths were only 2·8 p.c. of total births in the same year.

9.—Stillbirths, Classified by Age of Mother, by Provinces and Legitimacy of Child, 1937, with Averages or Totals, 1926-37, and Ratios to Totals, 1935, 1936 and 1937.

Age Group of Mother and Item.	Born to All Mothers.										Born to Unmarried Mothers.
	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]	
1937.											
Under 15 years	Nil	Nil	Nil	Nil	2	Nil	Nil	Nil	Nil	2	2
15-19 years	8	27	27	73	146	14	24	31	15	365	80
20-24 years	11	74	70	419	409	63	91	78	54	1,269	109
25-29 years	15	69	58	592	485	91	87	73	60	1,530	43
30-34 years	11	50	58	502	396	66	83	76	58	1,300	15
35-39 years	8	51	37	415	323	76	72	54	38	1,074	19
40-44 years	8	20	17	225	182	28	33	31	18	562	7
45 years or over	Nil	3	4	36	25	5	8	7	4	92	2
Not given	2	Nil	2	50	20	2	Nil	5	Nil	81	54
Av. 1926-30	**43**	**365**	**283**	**2,212**	**2,761**	**479**	**551**	**467**	**297**	**7,458**	**356**
Av. 1931-35	**67**	**401**	**302**	**2,337**	**2,284**	**383**	**488**	**421**	**247**	**6,931**	**381**
Totals—											
1935	**67**	**342**	**266**	**2,317**	**2,140**	**331**	**405**	**363**	**218**	**6,449**	**348**
1936	**70**	**292**	**237**	**2,365**	**2,034**	**323**	**431**	**376**	**222**	**6,350**	**333**
1937	**63**	**294**	**273**	**2,312**	**1,988**	**345**	**398**	**355**	**247**	**6,275**	**331**
Ratios to Total Births—											
1935	3·2	2·9	2·5	3·0	3·3	2·4	2·0	2·2	2·1	2·8	4·0
1936	3·4	2·4	2·2	3·0	3·2	2·5	2·2	2·3	2·1	2·8	3·7
1937	2·9	2·5	2·5	3·0	3·1	2·6	2·1	2·2	2·1	2·8	3·7

[1] Exclusive of the Territories.

Birth Rates in Various Countries.—The relative positions occupied by Canada and its individual provinces among various countries of the world with respect to crude birth rate (the annual number of births per 1,000 of population) are shown in Table **10.**

10.—Crude Birth Rates of Various Countries of the World and of Provinces of Canada in Recent Years.

Country.	Year.	Crude Birth Rate.	Country or Province.	Year.	Crude Birth Rate.
Egypt	1936	45·0	**Canada**—concluded.		
Palestine	1936	44·9	New Brunswick	1937	24·0
Straits Settlements	1936	44·3	Prince Edward Island	1937	22·5
Costa Rica	1936	43·0	Nova Scotia	1937	21·4
Salvador	1935	38·4	Alberta	1937	20·4
British India	1936	35·4	Saskatchewan	1937	19·9
Chile	1936	34·6	Manitoba	1937	18·0
Ceylon	1936	34·1	Ontario	1937	16·6
Jamaica	1936	32·4	British Columbia	1937	15·0
Roumania	1936	31·5	Irish Free State	1936	19·6
Japan	1936	29·9	Germany	1936	19·0
Greece	1935	28·3	Finland	1936	18·1
Panama	1934	27·1	Latvia	1936	18·1
Poland	1936	26·2	Scotland	1936	17·9
Bulgaria	1936	25·6	Denmark	1936	17·8
Newfoundland and Labrador	1936	25·2	Czechoslovakia	1936	17·4
Spain	1935	25·2	Australia	1936	17·1
Lithuania	1936	24·2	United States (reg. area)	1936	16·7
Union of South Africa (Whites)	1936	24·2	New Zealand	1936	16·6
Italy	1936	22·4	Estonia	1936	16·1
Iceland	1936	22·0	Switzerland	1936	15·6
Hungary	1936	20·4	British Isles	1936	15·5
Uruguay	1935	20·4	Belgium	1936	15·3
Netherlands	1936	20·2	France	1936	15·0
Northern Ireland	1936	20·0	England and Wales	1936	14·8
			Norway	1936	14·6
Canada	**1937**	**19·8**	Sweden	1936	14·2
Quebec	1937	24·1	Austria	1936	13·1

Section 2.—Marriages and Divorces.

Subsection 1.—Marriages.

The marriage rate in modern countries of the western world is appreciably influenced by the general level of prosperity prevailing. Marriages in such English-speaking countries, for instance, as the United Kingdom, the United States, Canada, and Australia tend to increase in "good times" and to diminish in "hard times", when great numbers of those who are contemplating marriage are led to postpone the event. Thus an examination of the figures for individual years over the past decade clearly shows that marriages reached a peak in 1929 after which the recession was steady and marked until 1932; for 1933 there was an improvement, though of little more than 2 p.c. over 1932, for 1934 a further improvement of over 14 p.c. was recorded, and the improvement continued from 1935 to 1937. This general trend for Canada as a whole was followed in the figures for each province, except in the cases of Prince Edward Island and Saskatchewan, both of which showed decreases as compared with 1936.

Summary statistics of marriages and marriage rates, 1935-37, with averages for 1921-25, 1926-30, and 1931-35, are given in Table **13,** p. 129 and in Table **32,** p. 151.

Age at Marriage.—The average age of all bridegrooms in the Dominion in 1936 was 29·1 years and that of all brides 25·0 years. The average excess of the bridegroom's age was thus 4·1 years. It may be noted in Table **11** that when the contracting parties are grouped by age of bridegroom, the average difference in age is less for the younger groups, grooms under 20 being 0·4 years younger than the brides, while the excess of the average bridegroom's age was 1·4 years in the group

20-24, and steadily increased for each quinquennial age group until it was 11·6 years for the bridegrooms 50 years or over in 1936. On the other hand, when the parties are grouped by the age of the bride, the same regularity is not shown. In the case of brides in the age groups 25-29 years and 30-34 years, the bridegrooms approximate most closely in age to their brides. Since these tables are based upon all marriages contracted during the year, the figures given should not be understood to signify the average ages at *first* marriage. Out of each 1,000 bridegrooms in 1937, 937 were bachelors, 53 widowers, 10 divorced men; out of each 1,000 brides, 958 were spinsters, 34 widows, 8 divorced women. The first year in which as many as 1 p.c. of those marrying had previously been divorced was 1928. The comparison between the figures of divorces granted, as shown in Table **15** of this chapter, and the number of divorced persons re-married is of some interest. Thus 1,870 divorces were granted in 1937, while 895 divorced males and 731 divorced females married again. This, of course, does not mean that these were the same persons. Table **12** gives the average ages of brides and grooms by provinces.

11.—Differences in Ages of Bridegrooms and Brides, 1936.

Age Group of Bridegrooms.	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.	Age Group of Brides.	Average Age of Brides.	Average Age of Bridegrooms.	Excess of Average Age of Bridegrooms.
All bridegrooms...	29·1	25·0	4·1	All brides..........	25·0	29·1	4·1
Under 20 years.....	19·1	19·5	−0·4	Under 20 years....	18·5	24·7	6·2
20-24 years.........	22·9	21·5	1·4	20-24 years.........	22·4	26·6	4·2
25-29 years.........	27·3	23·8	3·5	25-29 years.........	27·1	29·8	2·7
30-34 years.........	32·1	26·2	5·9	30-34 years.........	32·1	34·4	2·3
35-39 years.........	37·1	28·8	8·3	35-39 years.........	37·2	40·2	3·0
40-44 years.........	42·3	32·5	9·8	40-44 years.........	42·2	46·4	4·2
45-49 years.........	47·3	36·7	10·6	45-49 years.........	47·4	51·9	4·5
50 years or over....	59·7	48·1	11·6	50 years or over....	58·9	61·2	2·3

12.—Average Ages of Parties Contracting Marriage, by Provinces, 1935 and 1936.

Province.	1935.			1936.		
	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.	Average Age of Bridegrooms.	Average Age of Brides.	Excess of Average Age of Bridegrooms.
Prince Edward Island.......	29·4	25·0	4·4	29·9	25·3	4·6
Nova Scotia................	28·6	24·3	4·3	28·7	24·3	4·4
New Brunswick..............	28·4	24·2	4·2	28·4	24·2	4·2
Quebec.....................	29·2	25·6	3·6	29·2	25·6	3·6
Ontario....................	28·8	25·0	3·8	28·8	25·1	3·7
Manitoba...................	29·5	24·8	4·7	29·7	25·0	4·7
Saskatchewan...............	28·7	23·7	5·0	29·0	23·8	5·2
Alberta....................	29·2	24·1	5·1	29·3	24·2	5·1
British Columbia...........	30·2	25·7	4·5	30·3	25·8	4·5
Canada (exclusive of the Territories)............	**29·0**	**25·0**	**4·0**	**29·1**	**25·0**	**4·1**

Nativity of Brides and Bridegrooms.—The majority of marriages contracted in the western provinces in past years were between persons born outside Canada. This condition, however, is being quickly changed and such percentages in all the western provinces show a general reduction over the past few years. (See Table **13.**) Both Canadian-born brides and bridegrooms are now in the majority in each province and in the Maritime Provinces and Quebec they show a marked predominance. Taking Canada as a whole, nearly 82 p.c. of all grooms and over 88 p.c. of all brides in 1937 were born in Canada; these are the highest percentages shown for the period covered by the statistics.

13.—Percentage Distribution by Nativity of Persons Married in Canada, by Provinces, 1935, 1936, and 1937, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For figures for single years 1921-25, see the 1929 Year Book, p. 166; for 1926-30, the 1933 Year Book, pp. 163-164; for 1931-33, the 1936 Year Book, p. 164; and for 1934, the 1938 Year Book, p. 170.

Province.	Year.	Marriages.		Percentage Distribution of Grooms and Brides, by Nativity.					
		Total.	Per 1,000 Population.	Born in Province of Residence.		Born in Other Provinces.		Born Elsewhere.	
				Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.
		No.	No.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island	Av. 1921-25	473	5·4	90·8	93·8	5·1	2·6	4·1	3·7
	Av. 1926-30	473	5·4	90·8	93·5	4·1	2·9	5·1	3·6
	Av. 1931-35	496	5·6	89·7	92·6	4·7	3·6	5·6	3·8
	1935	516	5·8	90·3	93·6	4·5	3·3	5·2	3·1
	1936	595	6·5	87·1	90·9	5·7	5·2	7·2	3·9
	1937	584	6·3	87·8	91·6	5·5	4·8	6·7	3·6
Nova Scotia..........	Av. 1921-25	3,186	6·1	78·2	83·2	5·6	3·4	16·3	13·4
	Av. 1926-30	3,224	6·3	78·7	84·0	5·0	3·6	16·3	12·4
	Av. 1931-35	3,522	6·8	81·8	87·1	5·4	4·1	12·8	8·8
	1935	3,946	7·5	82·8	87·3	5·5	4·7	11·6	8·0
	1936	4,129	7·7	84·5	88·5	5·5	4·0	9·9	7·5
	1937	4,337	8·0	84·4	88·9	5·3	4·3	10·3	6·8
New Brunswick.......	Av. 1921-25	2,953	7·6	72·4	77·0	10·5	8·0	17·2	14·9
	Av. 1926-30	2,970	7·4	72·7	76·8	9·2	8·1	18·2	15·0
	Av. 1931-35	2,737	6·5	78·7	83·2	9·9	8·3	11·4	8·5
	1935	3,200	7·5	79·8	85·3	9·6	7·4	10·6	7·3
	1936	3,397	7·8	81·6	86·3	8·0	6·8	10·4	7·0
	1937	3,671	8·3	82·0	86·9	9·2	7·4	8·8	5·7
Quebec[1]...............	Av. 1926-30	18,731	6·9	80·6	83·5	4·0	3·5	15·4	13·0
	Av. 1931-35	17,089	5·8	81·3	84·7	4·2	4·0	14·5	11·3
	1935	19,967	6·5	84·5	87·6	4·3	4·4	11·2	8·0
	1936	21,654	7·0	85·8	89·1	4·3	4·0	9·9	6·8
	1937	24,876	7·9	86·5	90·0	4·5	4·1	8·9	5·9
Ontario...............	Av. 1921-25	24,037	8·0	61·0	64·5	6·7	5·8	32·4	29·6
	Av. 1926-30	25,449	7·8	57·2	61·9	7·3	6·8	35·5	31·3
	Av. 1931-35	24,260	6·8	62·9	69·5	7·0	7·4	30·1	23·1
	1935	26,843	7·3	71·0	77·5	5·6	6·1	23·4	16·4
	1936	27,734	7·5	74·0	79·6	5·3	5·9	20·7	14·5
	1937	29,893	8·1	80·1	82·6	4·7	5·5	15·3	11·9
Manitoba.............	Av. 1921-25	4,634	7·5	28·4	40·8	16·9	13·1	54·7	46·1
	Av. 1926-30	4,951	7·5	35·9	49·4	13·2	10·9	50·9	39·7
	Av. 1931-35	5,015	7·1	48·4	62·7	11·5	10·8	40·1	26·5
	1935	5,341	7·5	56·1	69·0	12·0	11·7	31·9	19·3
	1936	5,756	8·1	57·6	70·7	12·2	11·4	30·2	17·9
	1937	6,113	8·5	58·1	71·6	13·2	11·3	28·7	17·1
Saskatchewan.........	Av. 1921-25	4,982	6·4	9·7	21·0	30·5	26·7	59·8	52·3
	Av. 1926-30	6,036	7·0	18·6	35·9	26·5	21·2	54·9	42·9
	Av. 1931-35	5,680	6·1	36·7	59·5	20·4	15·0	42·9	25·5
	1935	6,036	6·5	45·5	67·1	18·7	14·1	35·8	18·9
	1936	6,168	6·6	48·3	71·0	18·8	12·7	32·9	16·2
	1937	5,790	6·2	51·5	73·9	17·4	11·8	31·1	14·3
Alberta...............	Av. 1921-25	4,313	7·3	9·8	19·2	25·1	22·9	65·1	57·9
	Av. 1926-30	5,265	8·0	16·3	28·6	22·3	19·4	61·3	52·0
	Av. 1931-35	5,530	7·4	28·5	47·3	20·6	18·6	50·9	34·0
	1935	6,010	7·9	34·7	54·9	21·7	19·6	43·6	25·6
	1936	6,020	7·8	37·2	57·4	21·0	18·7	41·8	23·9
	1937	6,345	8·2	40·3	59·4	21·2	18·4	38·6	22·2
British Columbia.....	Av. 1921-25	3,971	7·1	16·2	21·4	22·0	20·6	61·8	58·0
	Av. 1926-30	4,786	7·5	18·1	24·9	20·9	21·7	61·0	53·4
	Av. 1931-35	4,267	6·0	26·5	37·5	23·4	26·6	50·2	35·9
	1935	5,034	6·8	30·9	42·2	26·6	28·9	42·6	28·9
	1936	5,451	7·3	32·5	43·1	27·7	31·6	39·8	25·3
	1937	6,191	8·2	33·0	43·3	29·9	33·1	37·2	23·7
Canada[1] (exclusive of the Territories)....	**Av. 1926-30**	**71,885**	**7·3**	**54·9**	**61·4**	**10·4**	**9·2**	**34·8**	**29·4**
	Av. 1931-35	**68,596**	**6·4**	**60·9**	**69·8**	**9·9**	**9·4**	**29·1**	**20·8**
	1935	**76,893**	**7·0**	**67·1**	**75·5**	**9·5**	**9·2**	**23·4**	**15·3**
	1936	**80,904**	**7·3**	**69·5**	**77·6**	**9·3**	**8·9**	**21·2**	**13·5**
	1937	**87,800**	**7·9**	**72·6**	**79·4**	**9·3**	**8·8**	**18·1**	**11·8**

---

[1] Quebec was not included in the registration area prior to 1926.

Marriage Rates in Various Countries.—For comparative purposes, the crude marriage rates per 1,000 of population in various countries of the world and in the provinces of Canada are shown for the indicated years in Table **14.**

14.—Crude Marriage Rates of Various Countries of the World and of Provinces of Canada in Recent Years.

Country or Province.	Year.	Crude Marriage Rate per 1,000 Population.	Country.	Year.	Crude Marriage Rate per 1,000 Population.
Union of South Africa (Whites)	1936	11·1	Finland	1936	7·9
Denmark	1936	9·3	United States	1932[1]	7·9
New Zealand	1936	9·3	Belgium	1936	7·8
Roumania	1936	9·2	Japan	1936	7·8
Germany	1936	9·1	Norway	1936	7·8
Australia	1936	8·7	Scotland	1936	7·6
England and Wales	1936	8·7	Chile	1936	7·5
Estonia	1936	8·7	Lithuania	1936	7·5
Hungary	1936	8·6	Italy	1936	7·4
Sweden	1936	8·5	Netherlands	1936	7·4
Latvia	1936	8·4	Northern Ireland	1936	7·1
Poland	1936	8·4	Switzerland	1936	7·1
British Isles	1936	8·3	Austria	1936	6·8
Czechoslovakia	1936	8·0	France	1936	6·7
Bulgaria	1936	7·9	Greece	1935	6·7
Canada	**1937**	**7·9**	Newfoundland and Labrador	1936	6·6
Manitoba	1937	8·5	Spain	1935	6·1
New Brunswick	1937	8·3	Uruguay	1935	5·6
Alberta	1937	8·2	Iceland	1936	5·4
British Columbia	1937	8·2	Ceylon	1936	5·0
Ontario	1937	8·1	Irish Free State	1936	5·0
Nova Scotia	1937	8·0	Jamaica	1936	3·9
Quebec	1937	7·9	Salvador	1935	3·7
Prince Edward Island	1937	6·3	Panama	1934	3·3
Saskatchewan	1937	6·2			

[1] In the United States 1932 is the latest year for which the rate has been computed.

Subsection 2.—Divorces.

For many years subsequent to Confederation the number of divorces granted in Canada was very small, 1883, with 13 divorces, being the first year in which the number attained two figures, while 1903, with 21 divorces, was the record year up to that time. Thereafter the numbers grew more rapidly, 1909 showing 51 divorces and 1913, the last pre-war year, 60 divorces. This number was, however, less than one per 1,000 of the marriages contracted in Canada in these years.

One effect of the War was to increase divorce. The causes may be found in the generally unsettling psychological influences of the war period, and the long separations between men on active service and their wives. The provision of new facilities for divorce is also to be considered; owing to a decision of the British Privy Council, divorces in the Prairie Provinces, have, subsequently to 1918, been granted by the courts of these provinces, so that Ontario and Quebec have since then been the only provinces in which the applicant for divorce must secure a special private Act of Parliament. In 1930, however, an Act of the Dominion Parliament (20-21 Geo. V, c. 14) gave jurisdiction in divorce cases to the Supreme Court of Ontario.

The above-mentioned causes tended to increase the number of divorces granted in Canada, which grew steadily from 114 in 1918 to 873 in 1930. The numbers are those of final decrees, which alone really constitute divorces. In 1931 the number decreased to 692, this being largely due to the transfer of jurisdiction in

Ontario divorces from the Parliament of Canada to the Supreme Court of the province, with the consequent delay between the granting of the decree *nisi* and the decree absolute. Since 1931 there has been an increase of 170 p.c. in the total number of divorces granted. All the provinces show increases over that year. The statistics of divorces granted in the years 1918 to 1938, inclusive will be found in Table **15.***

15.—Statistics of Divorces Granted in Canada, 1918-38.

NOTE.—In consequence of a decision of the British Privy Council, divorces in Manitoba, Saskatchewan, and Alberta have, subsequently to 1918, been granted by the courts of these provinces. The statistics shown here have been revised since the publication of the 1937 Year Book. For divorces in each year prior to 1918, see the 1921 Year Book, p. 825.

Year.	Granted by the Dominion Parliament.			Granted by the Courts.						Total for Canada.
	P. E. Island.	Quebec.	Ontario.	Nova Scotia.	New Brunswick.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	
1918......	Nil	2	10	24	10	Nil	1[1]	2[1]	65	114
1919......	"	4	46	36	13	88[2]	3	36[2]	147	373
1920......	"	9	89	45	15	42	26	65	136	427
1921......	"	10	96	41	13	122	50	84	128	544
1922......	"	6	91	35	12	97	37	129	138	545
1923......	"	10	102	22	19	81	41	87	139[2]	501
1924......	"	13	113	42	15	77[3]	28	118	136[2]	542
1925......	"	13	119	30	15	79	42	101	150	549
1926......	"	10	111	19	12	85	48[2]	154	167	606
1927......	"	13	181	29	17	101	60	148	197	746
1928......	"	24	213	28	13	79	55	168	203	783
1929......	"	30	207	30	21	89	69	147	222	815
1930......	Nil	41	204	19	27	114	62	151	255	873
1931......	1	38	90[4]	36	20	94	51	154	208	692
1932......	Nil	27	338[4]	35	26	114	61	149	245	995
1933......	"	24	303[4]	27	12	116	48	135	258	923
1934......	"	38	356[4]	33	17	126	62	168	306	1,106
1935......	2	28	460[4]	52	36	145	60	209	384	1,376
1936......	Nil	40	507[4]	41	38	179	79	209	433	1,526
1937......	2	43	596[4]	36	54	200	109	241	589	1,870
1938......	2	83	813[4]	51	39	205	120	261	309	1,883

[1] Granted by Parliament. [2] One granted by Parliament. [3] Two granted by Parliament.
[4] Granted by the courts.

Section 3.—Deaths.

Within the past century, and more especially within the past generation, there has occurred throughout the countries of the white world a notable decline in the death rate, except where man has brought death upon himself through wars and the aftermath of wars. How far this decline has been due to advances in medical science, how far to better sanitation, and how far to the improvement in the general conditions of living, as a result of the increase in the productive power of humanity, is in dispute, but concerning the facts there is no doubt.

---

* The General Statistics Branch of the Dominion Bureau of Statistics publishes a bulletin on Divorce showing the sex of applicants and the number of persons re-married, together with comparisons with certain other countries. Application for this bulletin should be made to the Dominion Statistician.

Perhaps the most impressive testimony regarding this decline in the death rate is furnished by the mortality statistics of Sweden, where vital statistics have been kept with great accuracy for the whole nation ever since 1750. There, the crude death rate declined from an average of 27·4 per 1,000 in the decade 1751-60 to 14·3 in the decade 1911-20 and to 12·0 in 1936.

Similarly, in England and Wales, the crude death rate, which was 22·5 per 1,000 in the 60's, 21·4 in the 70's and 18·2 in the 90's of the past century, declined to 15·4 in the first decade of the present century and 12·1 in the third; it was 12·1 in 1936. In Scotland, again, the average rate was 22·1 in the '60's, 21·8 in the '70's, 18·6 in the '90's, 13·9 in 1921-25, 13·6 in 1926-30, and 13·4 in 1936.

There will always be years of specially high mortality, for instance 1918, when the death rate in Ontario, the most populous of the provinces of Canada, was 15·3 per 1,000, owing to the influenza-pneumonia epidemic, as against 12·0 in 1917 and 11·9 in 1919. Over a period, however, these abnormalities are reduced to negligibility, and it remains generally true that from decade to decade there is a decline in the crude death rates of the countries of the white man's world.

As for Canada, while the period elapsed since the introduction of complete and comprehensive vital statistics in 1920 has been too short to establish a definite downward trend, the rate of 12·4 per 1,000 for that year, in the eight provinces then included in the registration area, was substantially higher than in any subsequent year. A decided improvement is shown in the deaths and death rate of Quebec for the years 1933-36, although for 1937 the rate has increased to such a point that it is little better than it was in 1932 (11·3 as compared with 11·4). On the whole, however, improvement has been in evidence since 1926, and latterly Quebec has shown a lower rate than any of the provinces farther east.

Subsection 1.—General Mortality.

Summary statistics of total deaths and crude death rates in recent years are given in Table **32**, p. 151, for Canada, by provinces. The absolute number of deaths as well as the crude death rate was higher for 1936 and especially in 1937. In fact total deaths were greater in 1937 than they have been since 1920, and the death rate was higher than it has been since 1930, being 10·2 as compared with 9·7 in 1936 and 10·7 in 1930. Increased rates for 1937 are common to all provinces except Manitoba and Saskatchewan, both of which showed unusual increases in 1936 over 1935.

Age Distribution of Decedents.—The numbers of males and females dying in the nine provinces in 1936 and 1937 are given by single years of age up to 5 and by quinquennial age groups thereafter in Table **16**, together with the percentage of deaths occurring in each group in each of these years.

The quartile and decile ages of decedents for the years 1926, 1935, and 1936 are given for each sex and for the two sexes combined in Table **17**. The fifth decile and second quartile (or the median) both mark the middle points of the arrays, and the deciles, dividing each half into five groups, give a more detailed picture of the age distribution in each half than do the quartiles. It is shown very definitely that the average ages of decedents have been increasing steadily. The method of construction and interpretation of this table is given on p. 121 in connection with a similar one showing quartile and decile ages of married fathers and mothers.

16.—Numerical and Percentage Distribution of Deaths in Canada, by Sex and Age Groups, 1936-37.

Age Group.	Numbers.				Percentages.			
	Males.		Females.		Males.		Females.	
	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.
Under 1 year	8,281	9,508	6,293	7,185	14·4	15·3	12·8	13·9
1 year	1,058	1,479	929	1,185	1·8	2·4	1·9	2·3
2 years	527	645	411	540	0·9	1·0	0·8	1·0
3 years	352	462	289	375	0·6	0·7	0·6	0·7
4 years	268	334	267	292	0·5	0·5	0·5	0·6
Totals, Under 5 years	10,486	12,428	8,189	9,577	18·2	20·0	16·6	18·5
5- 9 years	1,021	1,194	930	968	1·8	1·9	1·9	1·9
10-14 years	796	874	675	751	1·4	1·4	1·4	1·5
15-19 years	1,108	1,173	1,019	1,030	1·9	1·9	2·1	2·0
20-24 years	1,347	1,371	1,427	1,364	2·3	2·2	2·9	2·6
25-29 years	1,304	1,289	1.352	1,366	2·3	2·1	2·7	2·6
30-34 years	1,257	1,361	1,364	1,359	2·2	2·2	2·8	2·6
35-39 years	1,425	1,546	1,496	1,446	2·5	2·5	3·0	2·8
40-44 years	1,748	1,817	1,582	1,641	3·0	2·9	3·2	3·2
45-49 years	2,350	2,513	1,806	1,880	4·1	4·0	3·7	3·6
50-54 years	3,104	3,229	2,304	2,351	5·4	5·2	4·7	4·5
55-59 years	3,761	3,971	2,637	2,674	6·5	6·4	5·3	5·2
60-64 years	4,377	4,760	3,139	3,203	7·6	7·7	6·4	6·2
65-69 years	4,997	5,270	3,898	3,835	8·7	8·5	7·9	7·4
70-74 years	5,697	5,733	4,758	4,918	9·9	9·2	9·6	9·5
75-79 years	5,648	5,892	5,034	5.139	9·8	9·5	10·2	9·9
80-89 years	6,367	6,747	6,445	6,844	11·0	10·9	13·1	13·2
90 years or over	892	904	1,261	1,361	1·5	1·5	2·6	2·6
Totals, Stated Ages	**57,685**	**62,072**	**49,316**	**51,707**	**100·0**	**100·0**	**100·0**	**100·0**
Ages not stated	43	37	6	8	-	-	-	-
Totals, All Ages	**57,728**	**62,109**	**49,322**	**51,715**	-	-	-	-

17.—Quartile and Decile Ages of Decedents, by Sex, 1926, 1935, and 1936.

Position in Array, by Age.		Both Sexes.			Males.			Females.		
		1926.	1935.	1936.	1926.	1935.	1936.	1926.	1935.	1936.
First quartiles	years of age	1·83	21·19	24·54	1·34	19·27	23·75	2·85	23·11	25·32
Second quartiles	"	45·50	58·09	59·28	45·16	57·53	58·94	45·89	58·87	59·78
Third quartiles	"	70·70	74·14	74·50	70·05	73·27	73·72	71·51	75·11	75·39
First deciles	months of age	0·88	2·93	3·80	0·60	2·39	3·05	1·43	3·87	4·87
Second deciles	years of age	0·71	7·08	12·77	0·55	4·85	10·18	0·98	10·61	15·42
Third deciles	"	6·95	31·26	34·64	4·30	30·40	34·93	12·15	32·14	34·37
Fourth deciles	"	28·77	48·08	50·11	26·47	48·06	50·40	30·61	48·10	49·72
Fifth deciles	"	45·50	58·09	59·28	45·16	57·53	58·94	45·89	58·87	59·78
Sixth deciles	"	58·40	65·52	66·27	57·73	64·66	65·54	59·13	66·71	67·18
Seventh deciles	"	67·15	71·53	72·03	66·44	70·58	71·10	68·00	72·64	72·95
Eighth deciles	"	74·05	76·56	76·86	73·28	75·71	76·08	74·00	77·56	77·83
Ninth deciles	"	80·82	82·27	82·48	79·89	81·26	81·64	81·85	83·25	83·39

Standardized Death Rates.—While the crude death rate gives the actual mortality per 1,000 of population, the differing age constitution of the population in different communities and the high mortality among infants and elderly people make the crude death rate no true test of the relative expectation of life in such communities. Where the age constitution of a particular group is particularly favourable to low mortality, for example among the selected lives of soldiers in peace time, the crude rate will naturally be lower than elsewhere.

When comparisons of the rates of mortality in several communities are made by age groups the effects of differences in age constitution between these communities are eliminated, but by a process which does not bring together and express completely as a single figure the facts of the situation. It has therefore been considered desirable to adopt a particular community as a standard, and to find what the death rates of other communities would have been if the age and sex constitution of their population had corresponded to those of the community taken as a standard. The 'standard' population chosen for this purpose in England and Wales and the United States is the "standard million", based on the age and sex distribution per million of the population of England and Wales at the Census of 1901. That age and sex distribution was as follows:—

Age Group.	Both Sexes.	Males.	Females.
All ages	1,000,000	483,543	516,457
Under 5 years	114,262	57,039	57,223
5- 9 years	107,209	53,462	53,747
10-14 years	102,735	51,370	51,365
15-19 years	99,796	49,420	50,376
20-24 years	95,946	45,273	50,673
25-34 years	161,579	76,425	85,154
35-44 years	122,849	59,394	63,455
45-54 years	89,222	42,924	46,298
55-64 years	59,741	27,913	31,828
65-74 years	33,080	14,691	18,389
75 years or over	13,581	5,632	7,949

Regarding the standard million of England and Wales the Registrar General says: "As the population of this country in 1901 included relatively few infants and old people it forms a standard exceptionally favourable to low mortality".

The process above described has been applied to the population of the eight provinces, the former registration area of Canada, for the years 1921-37 and to the population of Quebec for the years 1926-37 in Table **18**. Of the rates there given, those for 1921 and 1922 have been calculated directly, the proportion of the population in each sex and age group according to the Census of 1921 being assumed to hold true for 1922 also; similarly the rates for 1930, 1931, and 1932 have been calculated directly from the proportions shown in each sex and age group at the Census of 1931. For the intervening years, 1923-29, for which estimates of total population but not of population by age groups were available, the following method was adopted. The proportions which the standardized rates of 1921 and 1922 (correct to three decimal places) bore to the crude were averaged, similarly those of 1930 and 1931, and the change was assumed to have taken place in an arithmetical progression during the intervening seven years. Quebec not having been in the registration area in the year 1921, a standardized rate was not available for that year or for 1922, but as the proportion of the standardized rate to the crude depends primarily on the sex and age distribution of the population, and as this distribution was known for 1921 and 1931, and the actual proportion of standardized rate to crude rate for 1931, it was possible to compute a theoretical proportion for 1921. The same method was followed for the total of the nine provinces. The rates for 1933-37 have been computed on the assumption that the arithmetical progression, to which reference has been made, continued over those years in all provinces with the exception of the Prairie Provinces, for which the data of the 1936 Census were used.

In all of the eight provinces for which 1921 figures are given the proportion of the standardized rate to the crude was higher in 1921 than in 1931; in other words, the age distribution had become more unfavourable in the later year. In the Maritime Provinces, Quebec, and Ontario the process of 'standardizing' the death rate results in a reduced rate. This is particularly true of Prince Edward Island, which has the largest proportion of aged persons of all Canadian provinces. In the western provinces, on the other hand, the standardized rates are generally higher than the crude, although in Manitoba the standardized rate has been lower than the crude for the years 1933-37.

18.—Crude and Standardized Death Rates in Canada, by Provinces, 1930-37, with Averages, 1921-25, 1926-30, and 1931-35.

Province.	Averages.			1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	1921-25.	1926-30.	1931-35.								
P. E. Island—											
Crude	12·5	11·0	11·3	10·9	10·4	11·8	11·6	11·6	11·0	11·1	12·3
Standardized	9·3	8·1	7·9	7·9	7·4	8·2	8·1	8·1	7·6	7·6	8·4
Nova Scotia—											
Crude	12·6	12·4	11·7	12·0	11·6	11·9	11·6	11·5	11·7	11·0	11·2
Standardized	10·4	10·0	9·1	9·7	9·3	9·2	9·0	8·9	9·0	8·4	8·5
New Brunswick—											
Crude	13·1	12·5	11·2	12·3	11·4	11·0	11·7	11·0	11·1	11·0	12·3
Standardized	11·5	10·9	9·6	10·7	9·8	9·4	9·9	9·3	9·4	9·3	10·4
Quebec—											
Crude	[1]	13·5	11·1	12·7	12·0	11·4	10·7	10·6	10·7	10·3	11·3
Standardized	[1]	13·1	10·8	12·4	11·7	11·1	10·4	10·3	10·4	10·1	11·1
Ontario—											
Crude	11·3	11·2	10·1	11·0	10·4	10·5	9·9	9·7	9·9	10·2	10·4
Standardized	10·3	9·8	8·5	9·5	8·9	8·8	8·5	8·3	8·1	8·3	8·4
Manitoba—											
Crude	8·6	8·3	7·6	8·3	7·6	7·5	7·7	7·3	8·1	8·7	8·5
Standardized	9·4	8·8	7·6	8·6	7·9	7·8	7·6	7·0	7·8	8·4	8·1
Saskatchewan—											
Crude	7·5	7·3	6·5	7·0	6·6	6·5	6·5	6·4	6·6	6·8	7·4
Standardized	8·5	8·2	7·1	7·8	7·5	7·4	7·0	6·7	6·9	7·1	7·7
Alberta—											
Crude	8·3	8·4	7·3	7·8	7·2	7·5	7·1	7·1	7·5	8·0	8·0
Standardized	9·5	9·4	7·8	8·5	8·0	8·4	7·6	7·3	7·7	8·2	8·3
British Columbia—											
Crude	8·7	9·3	8·9	9·5	8·8	8·7	8·7	8·8	9·3	9·6	10·6
Standardized	9·0	8·9	8·0	8·7	8·1	8·0	7·8	7·8	8·1	8·2	8·9
Canada (exclusive of the Territories)—											
Crude	[1]	**11·1**	**9·7**	**10·7**	**10·1**	**9·9**	**9·6**	**9·4**	**9·7**	**9·7**	**10·2**
Standardized	[1]	**10·5**	**9·1**	**10·1**	**9·5**	**9·3**	**8·9**	**8·7**	**9·0**	**9·0**	**9·5**
Canada (Former Reg. Area)—											
Crude	**10·3**	**10·2**	**9·2**	**10·0**	**9·4**	**9·4**	**9·1**	**8·9**	**9·3**	**9·5**	**9·8**
Standardized	**9·9**	**9·5**	**8·3**	**9·2**	**8·6**	**8·5**	**8·2**	**8·0**	**8·2**	**8·4**	**8·6**

[1] Quebec was not included in the registration area prior to 1926.

Causes of Death.—Nearly 87 p.c. of deaths recorded in Canada in the years 1933 to 1937 were due to the 32 specific causes named in Tables **19** and **20**. In these tables the groupings are in accordance with the revision of the International List in 1929, which was first applied to Canadian mortality statistics for the year 1931. In the chart which accompanies the tables, the main object has been to attain the greatest degree of comparability possible over the whole period 1926-37. For this purpose it has been necessary to depart somewhat from the grouping of Tables **19** and **20**.

In any analysis of the relative importance of the causes of death it must be remembered that the Canadian population is an ageing one—that is, the average age is being advanced year by year due to the long-term influences of a falling birth rate, falling specific death rates, and very limited immigration. Since 1913 immigration has been very much curtailed and its effect on age distribution of population is illustrated by the movement of what may be termed the "immigration hump" (that increment of population due to extensive immigration before 1913). This is gradually passing up the age scale. Further, due to the improvements in sanitation and health conditions generally, the average age at which death takes place has been pushed gradually higher. All these factors tend to thrust those causes which are commonly associated with advancing years to the fore.

Some of the effects of the ageing of the population can be observed by the comparison of crude and standardized mortality rates for individual causes of death in 1921 and 1931, since standardized rates are calculated in order to eliminate the effects of changes in sex and age composition of the population. Cancer provides a pronounced example of the ageing effect. The crude rate for cancer was 75·3 in 1921 and in 1931 it was 95·8. The increase was thus 27 p.c. The standardized rate, however, was 72·7 in 1921 and 81·4 in 1931, an increase of only 12 p.c.* It may be stated, therefore, that roughly more than half of the increase in the crude cancer death rate between 1921 and 1931 was accounted for by the ageing of the population. Nevertheless, cancer shows a persistent increase over the years in spite of all efforts to control its spread. Diseases of the heart and arteries are two other important causes which affect people of advancing years and which have shown substantial increases. In the case of diseases of the heart, the crude rate showed an increase of 25·5 p.c. between 1921 and 1931, but, again, the standardized rate increased by only 9 p.c.* The crude rate for diseases of the arteries advanced by no less than 71 p.c. and the standardized by 50 p.c.* over the decade. For nephritis, a disease which falls in the same general class, the increase in the crude rate was 28·5 p.c. and in the standardized, 12·5 p.c.* Pneumonia is particularly fatal among those of advanced years and among infants; the same influences as have been mentioned have, no doubt, affected the figures for this disease.

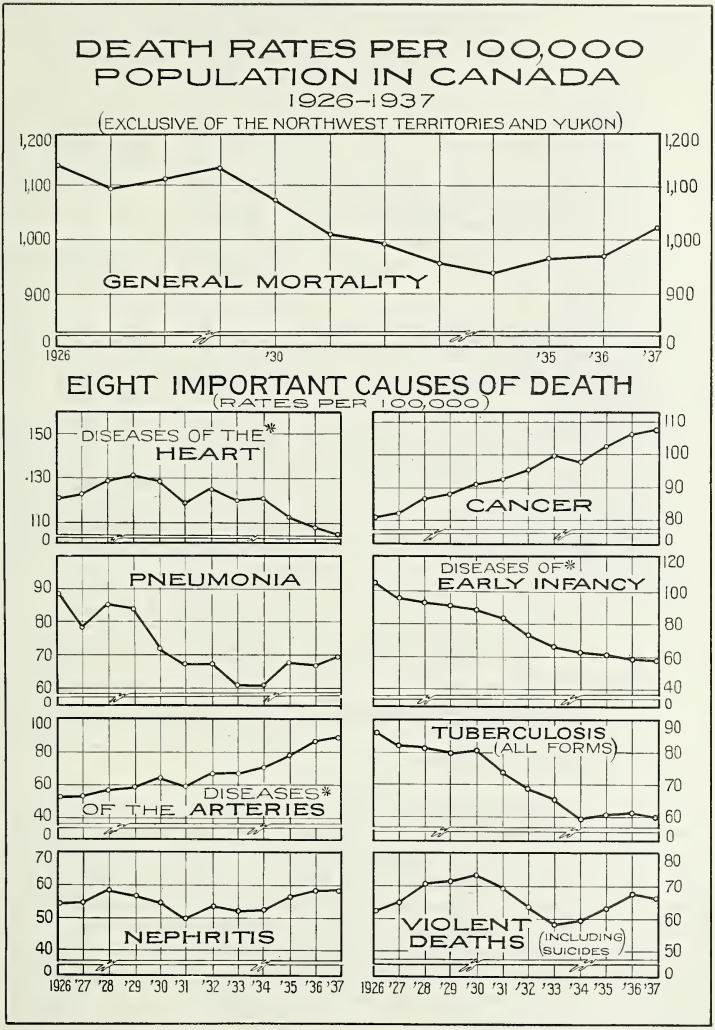
---

* More accurate diagnosis should not be overlooked as a factor in changing death rates from these diseases.

19.—Deaths in Canada, by Principal Causes, 1933-37.

Int. List No.[1]	Cause of Death.	1933.	1934.	1935.	1936.	1937.
1, 2	Typhoid fever	291	293	273	256	330
7	Measles	170	188	490	376	837
8	Scarlet fever	157	226	242	244	269
9	Whooping-cough	552	875	892	594	763
10	Diphtheria	239	232	264	258	369
11	Influenza	4,019	2,004	3,392	3,113	5,260
16	Poliomyelitis and polioencephalitis (acute)	73	84	64	97	200
17	Lethargic or epidemic encephalitis	58	47	54	52	50
18	Epidemic cerebrospinal meningitis	109	84	112	103	93
23	Tuberculosis, respiratory system	5,664	5,290	5,466	5,528	5,497
24-32	Tuberculosis, other organs	1,275	1,141	1,131	1,235	1,172
45-53	Cancer	10,653	10,581	11,156	11,694	11,963
59	Diabetes mellitus	1,287	1,321	1,459	1,442	1,555
71	Anæmia	736	612	650	646	623
82 a, b, c	Cerebral hæmorrhage, embolism or thrombosis	2,639	2,577	2,105	1,890	1,683
82d	Paralysis without specified cause	559	547	415	358	322
86	Convulsions (under 5 years of age)	263	261	234	200	195
90-95	Diseases of the heart	15,485	16,352	16,069	16,424	16,840
96, 97, 99, 102	Diseases of the arteries	6,950	7,379	8,302	9,112	9,609
106	Bronchitis	367	380	363	342	328
107-109	Pneumonia	6,487	6,530	7,411	7,313	7,731
119, 120	Diarrhœa and enteritis	3,395	3,730	2,767	2,378	4,216
121	Appendicitis	1,455	1,578	1,491	1,428	1,410
122	Hernia, intestinal obstruction	1,029	1,074	1,121	1,050	1,074
130-132	Nephritis	5,516	5,643	6,176	6,402	6,530
137	Diseases of the prostate	926	944	1,089	1,157	1,255
140-150	Puerperal causes	1,111	1,167	1,093	1,233	1,071
157	Congenital malformations	1,374	1,361	1,423	1,439	1,474
158-161	Diseases of early infancy	7,337	6,936	6,880	6,605	6,644
162	Senility (old age)	2,037	1,882	1,932	1,691	1,741
163-171	Suicides	922	927	905	928	978
173-198	Violent deaths (suicides excepted)	5,294	5,542	5,993	6,535	6,380
	Other specified causes	12,546	12,857	13,391	14,216	14,589
	Totals, Specified Causes	100,975	100,645	104,805	106,339	113,051
199, 200	Ill-defined diseases	993	937	762	711	773
	Totals	**101,968**	**101,582**	**105,567**	**107,050**	**113,824**

[1] The numbers given in this column refer to the International List of Causes of Death, as revised in 1929 by the International Commission on the Classification of Diseases and Causes of Death. This classification, in its detailed, intermediate, or abridged form, is accepted in almost all civilized countries.



* The rubrics (of the International List) included in the indicated groups have been selected to preserve the greatest degree of continuity possible. For this purpose it has been necessary to depart in these cases (indicated by the asterisks) from the groupings in Tables **19** and **20**. In all other cases the classification is the same as shown in the tables.

20.—Death Rates per 100,000 Population in Canada, by Principal Causes, 1933-37.

Int. List No.[1]	Cause of Death.	1933.	1934.	1935.	1936.	1937.
1, 2	Typhoid fever	2·7	2·7	2·5	2·3	3·0
7	Measles	1·6	1·7	4·5	3·4	7·5
8	Scarlet fever	1·5	2·1	2·2	2·2	2·4
9	Whooping-cough	5·2	8·1	8·2	5·4	6·9
10	Diphtheria	2·2	2·1	2·4	2·3	3·3
11	Influenza	37·7	18·5	31·1	28·3	47·4
16	Poliomyelitis and polioencephalitis (acute)	0·7	0·8	0·6	0·9	1·8
17	Lethargic or epidemic encephalitis	0·5	0·4	0·5	0·5	0·5
18	Epidemic cerebrospinal meningitis	1·0	0·8	1·0	0·9	0·8
23	Tuberculosis, respiratory system	53·1	48·9	50·1	50·2	49·5
24-32	Tuberculosis, other organs	12·0	10·6	10·4	11·2	10·6
45-53	Cancer	99·9	97·9	102·2	106·2	107·7
59	Diabetes mellitus	12·1	12·2	13·4	13·1	14·0
71	Anæmia	6·9	5·7	6·0	5·9	5·6
82 a, b, c	Cerebral hæmorrhage, embolism or thrombosis	24·7	23·8	19·3	17·2	15·2
82d	Paralysis without specified cause	5·2	5·1	3·8	3·3	2·9
86	Convulsions (under 5 years of age)	2·5	2·4	2·1	1·8	1·8
90-95	Diseases of the heart	145·2	151·3	147·1	149·1	151·6
96, 97, 99, 102	Diseases of the arteries	65·2	68·3	76·0	82·7	86·5
106	Bronchitis	3·4	3·5	3·3	3·1	3·0
107-109	Pneumonia	60·8	60·4	67·9	66·4	69·6
119, 120	Diarrhœa and enteritis	31·8	34·5	25·3	21·6	38·0
121	Appendicitis	13·6	14·6	13·7	13·0	12·7
122	Hernia, intestinal obstruction	9·6	9·9	10·3	9·5	9·7
130-132	Nephritis	51·7	52·2	56·6	58·1	58·8
137	Diseases of the prostate	8·7	8·7	10·0	10·5	11·3
140-150	Puerperal causes	10·4	10·8	10·0	11·2	9·6
157	Congenital malformations	12·9	12·6	13·0	13·1	13·3
158-161	Diseases of early infancy	68·8	64·2	63·0	60·0	59·8
162	Senility (old age)	19·1	17·4	17·7	15·4	15·7
163-171	Suicides	8·6	8·6	8·3	8·4	8·8
173-198	Violent deaths (suicides excepted)	49·6	51·3	54·9	59·3	57·4
	Other specified causes	117·6	118·9	122·6	129·1	131·4
	Totals, Specified Causes	946·6	931·0	959·7	965·5	1,017·9
199, 200	Ill-defined diseases	9·3	8·7	7·0	6·5	7·0
	Totals, Death Rates per 100,000 Population	**955·9**	**939·7**	**966·6**	**971·9**	**1,024·9**

For footnote, see end of Table **19**, p. 136.

Deaths in Canadian Cities.—Table **21** gives the numbers of deaths in Canadian cities and towns of 10,000 population or over for the years 1933-37, together with averages, 1926-30 and 1931-35. Deaths in Canada as a whole declined steadily for the period 1931-34, but for 1935, 1936, and 1937 there were substantial increases. The figure for the latter year was 113,824, over 9,000 more than for 1931. The total deaths of the 67 cities listed in Table **21** show a slightly increased proportion to population for the five-year period 1931-35 as compared with 1926-30. For 1932, which marked the depth of the economic depression, the deaths in these cities increased, thus going against the general trend for Canada; for other years, however, the general trend was followed.

Deaths by Place of Residence.—The Vital Statistics Branch of the Dominion Bureau of Statistics, has, at the time of going to press, a report in process of compilation showing deaths by places of residence, (see p. 116).

21.—Deaths in Cities and Towns of 10,000 Population or Over, 1933-37, with Averages, 1926-30 and 1931-35.

Province and City or Town.	Census Population, 1931.	Averages.		1933.	1934.	1935.	1936.	1937.
		1926-30.	1931-35.					
P. E. Island—								
Charlottetown	12,361	264	262	252	268	248	277	315
Nova Scotia—								
Glace Bay	20,706	294	258	235	256	269	273	245
Halifax	59,275	884	898	883	927	874	871	858
Sydney	23,089	241	213	213	228	233	177	183
New Brunswick—								
Moncton	20,689	252	245	266	240	247	227	284
Saint John	47,514	712	667	726	626	586	648	674
Quebec—								
Chicoutimi	11,877	228	224	247	248	240	261	261
Granby	10,587	115	115	76	110	121	131	99
Hull	29,433	354	360	343	335	363	305	354
Joliette	10,765	173	172	175	170	166	163	181
Lachine	18,630	214	186	179	182	193	182	205
Lévis	11,724	223	219	204	201	209	187	228
Montreal	818,577	11,260	9,808	9,239	9,261	9,577	9,389	10,111
Outremont	28,641	105	161	166	179	178	167	191
Quebec	130,594	2,269	1,991	2,043	1,874	1,862	1,907	2,283
St. Hyacinthe	13,448	288	293	294	255	292	308	348
St. Jean	11,256	120	125	111	112	139	161	179
Shawinigan Falls	15,345	199	157	159	141	158	156	172
Sherbrooke	28,933	450	443	416	429	483	445	477
Sorel	10,320	167	141	129	127	161	129	119
Thetford Mines	10,701	157	139	146	132	157	149	209
Three Rivers	35,450	556	610	598	676	616	655	710
Valleyfield	11,411	180	154	147	152	145	173	171
Verdun	60,745	398	460	409	463	518	453	555
Westmount	24,235	143	249	231	279	243	268	264
Ontario—								
Belleville	13,790	230	227	208	209	245	259	235
Brantford	30,107	382	362	376	350	354	403	393
Chatham	14,569	300	303	288	265	336	325	318
Cornwall	11,126	238	234	209	240	239	260	269
Fort William	26,277	215	203	198	186	216	219	225
Galt	14,006	172	187	201	196	197	169	169
Guelph	21,075	235	234	236	242	226	204	236
Hamilton	155,547	1,473	1,491	1,406	1,462	1,547	1,639	1,641
Kingston	23,439	476	476	445	452	532	488	473
Kitchener	30,793	303	347	354	310	366	384	391
London	71,148	1,089	1,020	1,019	1,005	1,049	1,104	1,081
Niagara Falls	19,046	215	200	206	202	187	202	209
North Bay	15,528	149	155	138	176	172	171	188
Oshawa	23,439	216	186	167	195	176	222	236
Ottawa	126,872	1,664	1,715	1,701	1,618	1,822	1,787	1,870
Owen Sound	12,839	163	181	179	164	187	183	206
Peterborough	22,327	308	324	290	353	323	374	361
Port Arthur	19,818	224	197	187	189	189	218	221
St. Catharines	24,753	317	283	281	271	301	311	322
St. Thomas	15,430	226	227	225	224	251	266	268
Sarnia	18,191	222	224	235	220	201	261	236
Sault Ste. Marie	23,082	218	214	187	214	229	238	262
Stratford	17,742	200	199	198	191	221	200	222
Sudbury	18,518	215	235	212	229	241	327	313
Timmins	14,200	146	171	163	170	182	190	219
Toronto	631,207	6,735	6,546	6,485	6,266	6,605	7,044	7,049
Welland	10,709	162	138	121	152	135	146	172
Windsor[1]	98,179	965	838	795	862	853	882	979
Woodstock	11,395	173	177	181	195	178	193	191
Manitoba—								
Brandon	16,461[2]	244	225	216	209	234	239	233
St. Boniface	16,275[2]	482	417	395	368	473	499	486
Winnipeg	215,814[2]	1,757	1,712	1,656	1,663	1,832	2,018	1,891

---

[1] Includes East Windsor, Sandwich, and Walkerville.

[2] Census of 1936.

21.—Deaths in Cities and Towns of 10,000 Population or Over, 1933-37, with Averages, 1926-30 and 1931-35—concluded.

Province and City or Town	Census Population, 1931.	Averages.		1933.	1934.	1935.	1936.	1937.
		1926-30.	1931-35.					
Saskatchewan—								
Moose Jaw	19,805[1]	226	196	217	186	173	212	273
Prince Albert	11,049[1]	153	175	170	171	187	207	205
Regina	53.354[1]	481	468	457	448	511	535	592
Saskatoon	41,734[1]	485	450	429	453	467	484	551
Alberta—								
Calgary	83,407[1]	756	730	708	723	774	887	828
Edmonton	85,774[1]	862	884	870	883	948	1,100	1,083
Lethbridge	13,523[1]	185	193	198	212	192	189	187
British Columbia—								
New Westminster	17,524	273	287	286	277	304	355	378
Vancouver	246,593	2,175	2,303	2,239	2,211	2,466	2,707	2,782
Victoria	39,082	552	561	543	589	608	678	708

---

[1] Census of 1936.

Comparative Crude Death Rates of Different Countries.—In Table 22 will be found a comparative statement of the crude death rates of various countries for the latest available year. Those of the provinces of Canada are also given for comparison. The Netherlands, New Zealand, Australia, and the Union of South Africa (Whites), are the only countries with death rates under 10·0 per 1,000 of population. The low death rates in the Prairie Provinces are, in all three cases, due in part to a favourable age distribution of population.

22.—Crude Death Rates of Various Countries and of the Provinces of Canada in Recent Years.

Country or Province.	Year.	Crude Death Rate.	Country.	Year.	Crude Death Rate.
Netherlands	1936	8·7	Finland	1936	13·1
New Zealand	1936	8·8	Austria	1936	13·2
Australia	1936	9·4	Czechoslovakia	1936	13·3
Union of South Africa (Whites)	1936	9·6	Scotland	1936	13·4
Canada	**1937**	**10·2**	Lithuania	1936	13·4
Saskatchewan	1937	7·4	Italy	1936	13·7
Alberta	1937	8·0	Latvia	1936	14·1
Manitoba	1937	8·5	Bulgaria	1936	14·1
Ontario	1937	10·4	Poland	1936	14·2
British Columbia	1937	10·6	Northern Ireland	1936	14·2
Nova Scotia	1937	11·2	Hungary	1936	14·3
Quebec	1937	11·3	Irish Free State	1936	14·4
Prince Edward Island	1937	12·3	Greece	1935	14·9
New Brunswick	1937	12·3	Spain	1935	15·3
Norway	1936	10·4	France	1936	15·3
Uruguay	1935	10·6	Estonia	1936	15·6
Iceland	1936	10·8	Palestine	1936	16·1
Denmark	1936	11·0	Jamaica	1936	17·4
Switzerland	1936	11·4	Japan	1936	17·5
United States (reg. area)	1936	11·5	Roumania	1936	19·8
Germany	1936	11·8	Costa Rica	1936	20·0
Panama	1934	11·9	Ceylon	1936	21·8
Sweden	1936	12·0	British India	1936	22·6
England and Wales	1936	12·1	Salvador	1935	24·0
British Isles	1936	12·5	Straits Settlements	1936	24·9
Belgium	1936	12·9	Chile	1936	25·3
Newfoundland and Labrador	1936	13·0	Egypt	1936	29·4

Subsection 2.—Infantile and Maternal Mortality.

In recent years a great part of the energy devoted by the medical profession and sanitarians to effect a decline in the death rate has gone to reduce infantile mortality, and in this field a large measure of success has been attained. In Canada, the Dominion, provincial, and municipal health authorities have all taken part in the struggle to reduce infantile mortality, and usually, in the absence of epidemics, each year is showing an improvement. In the seventeen years for which the figures are available there is evident a very considerable decline in infantile mortality, although the rate for 1937 shows an increase over 1936. In 1921 the infant death rate for Canada (using figures from provincial sources for Quebec) was 102 per 1,000 live births. This rate had been reduced to 76 in 1937. Table **23** gives figures for the whole of Canada for the years 1931 to 1937 and averages for the five-year periods 1921-25, 1926-30, and 1931-35. The infantile mortality in Quebec, which has exceeded that of any other province in the past, was below that of New Brunswick in 1937. A study of the Quebec rates shows that steady improvement has been made in the eleven-year period during which the province has been included in the registration area. In Canada as a whole almost 7,000 infant lives were preserved in 1937 which, under conditions prevailing in 1926, would probably have been lost.

23.—Infantile Mortality, by Provinces, together with the Rates per 1,000 Live Births, 1931-37, with Averages for 1921-25, 1926-30, and 1931-35.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
A.—INFANT DEATHS.										
Averages, 1921-25	151	1,139	1,165	[2]	5,916	1,394	1,789	1,327	621	[2]
Averages, 1926-30	122	934	1,039	10,518	5,091	1,031	1,559	1,195	571	22,060
Averages, 1931-35	131	840	857	7,756	3,962	835	1,261	998	464	17,104
1931	128	914	944	9,443	4,833	924	1,463	1,197	514	20,360
1932	132	849	774	7,744	4,133	836	1,321	997	477	17,263
1933	118	791	821	7,270	3,804	844	1,231	966	439	16,284
1934	130	807	878	7,388	3,523	734	1,093	891	426	15,870
1935	145	838	866	6,939	3,515	837	1,194	936	460	15,730
1936	137	781	806	6,220	3,416	779	1,030	940	465	14,574
1937	152	812	1,072	7,580	3,382	826	1,245	994	630	16,693
B.—INFANT DEATH RATES PER 1,000 LIVE BIRTHS.										
Averages, 1921-25	77	94	105	[2]	83	84	83	86	61	[2]
Averages, 1926-30	71	85	101	127	74	72	73	75	55	93
Averages, 1931-35	67	73	82	98	61	61	62	60	46	75
1931	68	79	87	113	70	64	69	69	49	85
1932	65	73	72	94	62	59	63	59	47	73
1933	61	71	82	95	60	63	61	60	46	73
1934	67	71	86	97	57	55	55	55	43	72
1935	72	72	83	92	56	63	61	58	46	71
1936	69	66	77	83	55	61	54	60	44	66
1937	73	70	101	100	55	64	67	63	56	76

[1] Exclusive of the Territories.

[2] Quebec was not included in the registration area prior to 1926.

Infantile Mortality by Causes of Death.—Twenty-one principal causes of death accounted in the years 1926 to 1937 for between 91 and 92 p.c. of the infantile mortality experienced in the Dominion, as is shown in Table **24**. It is noteworthy that four causes present at birth, *viz.*, premature birth, injury at birth, congenital debility, and congenital malformations, accounted for over 40 p.c. of the infant deaths of 1937. In 1926 it was 41·4 and in 1930, 42·3, and since the decline in rate of infant deaths has decreased by nearly 30 p.c. in the interval since 1926, great improvement in the post-natal care of infants is indicated. In the years 1936 and 1937, 50·7 p.c. and 45·1 p.c., respectively, of all infants who died were less than one month old, and 37·2 p.c., and 32·5 p.c., respectively, were less than one week old, as is shown in Table 25.

24.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1936-37.

NOTE.—Figures for the former registration area for the single years 1921 to 1924 will be found at pp. 182-183 of the 1927-28 Year Book, and for 1925 to 1927 at pp. 177-178 of the 1929 Year Book. Figures for the whole of Canada for the years 1927 and 1928 will be found at pp. 138-140 of the 1932 Year Book, for 1929 and 1930 at pp. 177-178 of the 1933 Year Book, for 1931, 1932, and 1933 at pp. 202-203 of the 1934-35 Year Book, for 1934 at pp. 176-177 of the 1936 Year Book, and for 1935 at pp. 182-183 of the 1938 Year Book.

International List No.	Cause of Death.	Year.	Numbers.			Rates per 100,000 Live Births.			Percentage Distribution by Cause of Death.
			Males.	Females.	Both.	Males.	Females.	Both.	
7	Measles	1926	141	122	263	118	108	113	1·1
		1936	66	49	115	58	46	52	0·8
		1937	158	110	268	140	103	122	1·6
8	Scarlet fever	1926	13	12	25	11	11	11	0·1
		1936	7	4	11	6	4	5	0·1
		1937	6	5	11	5	5	5	0·1
9	Whooping-cough	1926	358	415	773	299	368	332	3·3
		1936	203	189	392	179	177	178	2·7
		1937	216	269	485	191	251	220	2·9
10	Diphtheria	1926	24	23	47	20	20	20	0·2
		1936	8	3	11	7	3	5	0·1
		1937	10	14	24	9	13	11	0·1
11	Influenza[1]	1926	576	374	950	481	331	408	4·0
		1936	344	232	576	304	217	261	4·0
		1937	545	394	939	482	368	426	5·6
15	Erysipelas	1926	51	50	101	43	44	43	0·4
		1936	42	27	69	37	25	31	0·5
		1937	13	9	22	11	8	10	0·1
16	Poliomyelitis and polio-encephalitis (acute)	1926	6	3	9	5	3	4	0·3
		1936	1	3	4	1	3	2	[2]
		1937	7	2	9	6	2	4	0·1
18	Epidemic cerebro-spinal meningitis	1926	33	24	57	28	21	24	0·2
		1936	11	4	15	10	4	7	0·1
		1937	12	12	24	11	11	11	0·1
23–32	Tuberculosis[1]	1926	131	102	233	109	90	100	1·0
		1936	93	65	158	82	61	72	1·1
		1937	85	64	149	75	60	68	0·9
34	Syphilis	1926	68	60	128	57	53	55	0·5
		1936	118	89	207	104	83	94	1·4
		1937	121	81	202	107	76	92	1·2
86	Convulsions	1926	263	177	440	219	157	189	1·9
		1936	107	55	162	94	51	74	1·1
		1937	83	56	139	73	52	63	0·8
106	Bronchitis	1926	90	60	150	75	53	64	0·6
		1936	39	37	76	34	35	34	0·5
		1937	34	32	66	30	30	30	0·4
107–109	Pneumonia	1926	1,410	1,077	2,487	1,176	954	1,069	10·5
		1936	967	783	1,750	854	731	794	12·0
		1937	1,105	809	1,914	977	755	869	11·5
116–118	Diseases of the stomach	1926	156	126	282	130	112	121	1·2
		1936	70	40	110	62	37	50	0·8
		1937	52	43	95	46	40	43	0·6

---

[1] For these causes the comparability between the figures for the year 1926 and those for the years 1936-37 is not exact, owing to changes in classification. [2] Less than one-tenth of one per cent.

24.—Infantile Mortality in Canada by Principal Causes of Death, 1926, 1936-37 —concluded.

International List No.	Cause of Death.	Year.	Numbers.			Rates per 100,000 Live Births.			Percentage Distribution by Cause of Death.
			Males.	Females.	Both.	Males.	Females.	Both.	
119	Diarrhœa and enteritis[1]	1926	2,451	1,867	4,318	2,045	1,654	1,855	18·2
		1936	932	702	1,634	823	656	741	11·2
		1937	1,627	1,238	2,865	1,438	1,156	1,301	17·2
122	Hernia, intestinal obstruction	1926	68	39	107	57	35	46	0·5
		1936	41	32	73	36	30	33	0·5
		1937	41	18	59	36	17	27	0·4
157	Congenital malformations	1926	777	635	1,412	648	563	607	6·0
		1936	690	569	1,259	609	531	571	8·6
		1937	723	583	1,306	639	544	593	7·8
158	Congenital debility	1926	1,353	1,000	2,353	1,129	886	1,011	9·9
		1936	686	479	1,165	606	447	529	8·0
		1937	641	475	1,116	567	444	507	6·7
159	Premature birth	1926	2,936	2,147	5,083	2,449	1,902	2,184	21·5
		1936	1,951	1,515	3,466	1,722	1,415	1,573	23·8
		1937	1,984	1,474	3,458	1,754	1,376	1,570	20·7
160	Injury at birth	1926	563	386	949	470	342	408	4·0
		1936	529	332	861	467	310	391	5·9
		1937	525	336	861	464	314	391	5·2
161	Other diseases peculiar to early infancy[1]	1926	885	622	1,507	738	551	647	6·4
		1936	613	500	1,113	541	467	505	7·6
		1937	707	502	1,209	625	469	549	7·2
	Other specified causes[1]	1926	1,081	779	1,860	902	690	799	7·9
		1936	664	502	1,166	586	469	529	8·0
		1937	683	552	1,235	604	515	561	7·4
199, 200	Ill-defined causes	1926	103	55	158	86	49	68	0·7
		1936	99	82	181	87	77	82	1·2
		1937	130	107	237	115	100	108	1·4
	All Causes	**1926**	**13,537**	**10,155**	**23,692**	**11,294**	**8,996**	**10,179**	**100·0**
		1936	**8,281**	**6,293**	**14,574**	**7,310**	**5,877**	**6,613**	**100·0**
		1937	**9,508**	**7,185**	**16,693**	**8,404**	**6,709**	**7,580**	**100·0**

---

[1] For these causes the comparability between the figures for the year 1926 and those for the years 1936-37 is not exact, owing to changes in classification.

25.—Proportion per 1,000 Deaths of Infants Under One Year of Age Occurring at each Age Period, 1936-37.

Age at Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
1936.										
Under 1 month	540	472	511	480	566	489	527	496	484	507
Under 1 day	*204*	*150*	*165*	*142*	*239*	*198*	*189*	*186*	*200*	*178*
1 day and under 1 week	*197*	*207*	*228*	*180*	*215*	*200*	*182*	*178*	*198*	*194*
1 week and under 2 weeks	*66*	*51*	*53*	*73*	*50*	*45*	*68*	*48*	*41*	*61*
2 weeks and under 3 weeks	*22*	*27*	*36*	*46*	*34*	*17*	*44*	*50*	*22*	*39*
3 weeks and under 1 month	*51*	*37*	*29*	*40*	*28*	*30*	*45*	*34*	*24*	*35*
1 month and under 2 months	117	109	96	110	83	76	79	82	95	97
2 months and under 3 months	95	104	98	86	69	62	87	84	60	82
3 months and under 4 months	36	77	57	62	56	59	62	63	69	61
4 months and under 5 months	58	63	40	50	46	59	45	54	56	50
5 months and under 6 months	51	42	32	40	34	54	38	47	32	39
6 months and under 7 months	7	32	38	42	29	35	32	35	37	36
7 months and under 8 months	36	19	17	32	31	40	33	31	43	31
8 months and under 9 months	15	17	36	27	28	37	28	34	26	28
9 months and under 10 months	15	24	29	27	21	28	27	31	30	26
10 months and under 11 months	15	26	29	21	20	32	27	23	32	23
11 months and under 1 year	15	15	17	21	17	30	15	20	37	20
Totals	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**

---

[1] Exclusive of the Territories.

25.—Proportion of 1,000 Deaths of Infants Under One Year of Age Occurring at each Age Period, 1936-37—concluded.

Age at Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
1937.										
Under 1 month	474	440	438	391	571	449	475	495	441	451
Under 1 day	*118*	*123*	*125*	*121*	*242*	*186*	*160*	*177*	*176*	*157*
1 day and under 1 week	*217*	*179*	*174*	*144*	*216*	*160*	*165*	*169*	*171*	*168*
1 week and under 2 weeks	*72*	*62*	*53*	*54*	*53*	*45*	*60*	*56*	*38*	*54*
2 weeks and under 3 weeks	*20*	*37*	*46*	*39*	*31*	*35*	*43*	*43*	*30*	*37*
3 weeks and under 1 month	*46*	*39*	*40*	*33*	*30*	*23*	*47*	*49*	*25*	*35*
1 month and under 2 months	99	112	98	99	67	109	106	102	94	94
2 months and under 3 months	92	96	77	92	67	81	80	85	62	83
3 months and under 4 months	92	81	81	77	62	61	48	67	60	71
4 months and under 5 months	46	48	63	57	46	54	60	49	49	54
5 months and under 6 months	59	38	48	56	40	46	44	44	46	49
6 months and under 7 months	26	30	37	44	36	41	43	21	49	40
7 months and under 8 months	33	38	44	43	30	39	35	28	56	39
8 months and under 9 months	13	38	35	40	22	24	35	34	48	34
9 months and under 10 months	7	26	30	39	19	34	22	24	27	30
10 months and under 11 months	13	32	27	32	20	35	30	26	35	29
11 months and under 1 year	46	21	21	29	21	27	22	24	33	26
Totals	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**	**1,000**

[1] Exclusive of the Territories.

Infantile Mortality in Canadian Cities and Towns.—Table **26** shows for the cities and towns of 10,000 population or over, the numbers of infant deaths and the death rates per 1,000 live births for the years 1935-37. But a very low rate for any particular year means little since wide fluctuations from year to year are the rule. Moreover, since maternity hospitals in many urban centres draw patients from surrounding districts, the rates based on place of occurrence, shown in Table **26,** are often quite different from rates based on place of residence. This is illustrated particularly in the case of Westmount, where the number of infant deaths under one year by place of occurrence in 1937 was 25 compared with 8 by place of residence. Vancouver has a spendid record among the large cities over the three years. Three Rivers, Quebec city, Sorel, Hull, Glace Bay, Thetford Mines, Chicoutimi, Joliette, and Westmount have all rates of over 100 for 1937, and most of them have high rates over the three-year period. Apart from Vancouver, already mentioned, among the large cities Montreal has recorded steady improvement over the period and Winnipeg and Toronto have very low rates and good records.

The infantile mortality in the cities of Canada has been greatly reduced in the years since the inauguration of Dominion vital statistics. Thus the rate for Toronto has fallen from 90 in 1921 to 47 in 1937, that for Winnipeg from 78 to 42, for Vancouver from 56 to 33, for Hamilton from 88 to 38, for Ottawa from 130 to 85, for London from 92 to 37, for Edmonton from 89 to 46, for Halifax from 135 to 67, for Saint John from 147 to 62. Altogether, in the 13 cities of 40,000 population or over in the former registration area of Canada, there were 41,923 live births in 1921 and 3,833 infant deaths, being a rate of 91 per 1,000 live births. In 1937 in these same cities there were 35,940 live births but only 1,762 infant deaths, or a rate of 49 per 1,000 live births.

26.—Deaths and Death Rates of Children Under One Year of Age (Exclusive of Stillbirths) in Cities and Towns of 10,000 or Over, 1935-37, with Averages, 1926-30 and 1931-35.

City or Town.	Infant Deaths.					Rates per 1,000 Live Births.				
	Average 1926-30.	Average 1931-35.	1935.	1936.	1937.	Average 1926-30.	Average 1931-35.	1935.	1936.	1937.
Belleville, Ont	27	20	25	31	18	72	53	66	72	47
Brandon, Man	26	18	15	20	8	67	59	57	80	30
Brantford, Ont	52	34	35	31	31	76	54	58	47	51
Calgary, Alta	113	74	73	86	67	62	44	45	53	41
Charlottetown, P.E.I	30	26	26	30	38	105	72	74	74	95
Chatham, Ont	38	33	35	28	29	78	68	66	48	43
Chicoutimi, Que	72	57	45	43	54	129	112	89	85	105
Cornwall, Ont	48	38	32	50	52	102	79	53	89	90
Edmonton, Alta	140	109	75	94	121	66	49	33	41	46
Fort William, Ont	46	32	29	27	14	73	57	55	56	28
Galt, Ont	16	15	16	10	7	57	51	58	37	24
Glace Bay, N.S	85	69	85	89	93	127	98	109	111	113
Granby, Que	29	28	32	30	17	96	79	104	100	54
Guelph, Ont	23	20	16	11	13	59	57	47	37	44
Halifax, N.S	127	119	105	104	110	87	73	63	59	67
Hamilton, Ont	200	167	135	115	106	66	56	49	42	38
Hull, Que	132	102	91	76	102	132	117	112	92	125
Joliette, Que	52	35	24	30	29	149	106	72	104	104
Kingston, Ont	59	38	29	46	34	99	58	42	68	47
Kitchener, Ont	43	35	34	34	34	58	47	45	46	46
Lachine, Que	49	29	20	22	29	111	73	57	62	75
Lethbridge, Alta	33	34	30	25	27	76	64	52	43	46
Lévis, Que	37	25	15	18	23	120	96	65	85	95
London, Ont	91	77	70	77	54	66	56	49	55	37
Moncton, N.B	40	24	21	23	40	76	49	46	47	81
Montreal, Que	2,735	1,862	1,550	1,410	1,535	135	98	87	81	87
Moose Jaw, Sask	39	24	15	23	27	62	52	35	51	57
New Westminster, B.C	27	24	26	30	27	51	43	47	47	36
Niagara Falls; Ont	31	21	20	9	14	66	50	46	23	34
North Bay, Ont	35	23	18	28	27	85	59	46	71	70
Oshawa, Ont	53	29	22	31	31	83	55	42	59	58
Ottawa, Ont	327	257	286	267	255	110	87	94	88	85
Outremont, Que	8	5	5	3	2	65	53	60	44	40
Owen Sound, Ont	15	16	11	12	17	46	50	34	37	52
Peterborough, Ont	39	35	36	45	27	67	61	63	72	43
Port Arthur, Ont	45	24	13	21	20	83	47	25	39	35
Prince Albert, Sask	34	27	33	22	30	102	68	70	51	61
Quebec, Que	727	538	390	389	557	166	130	101	101	142
Regina, Sask	92	61	59	61	71	67	48	50	53	52
St. Boniface, Man	59	46	46	36	39	70	43	42	32	35
St. Catharines, Ont	40	27	20	34	19	67	46	36	59	33
St. Hyacinthe, Que	55	42	35	29	38	166	119	98	77	93
St. Jean, Que	26	19	18	23	15	79	64	65	75	51
St. Thomas, Ont	20	16	18	17	10	60	54	61	58	34
Saint John, N.B	113	91	72	84	75	99	76	62	69	62
Sarnia, Ont	32	22	22	22	22	74	53	52	51	53
Saskatoon, Sask	86	48	27	34	52	81	50	31	38	60
Sault Ste. Marie, Ont	42	25	20	40	40	69	44	38	72	77
Shawinigan Falls, Que	103	53	42	45	46	157	93	82	85	95
Sherbrooke, Que	77	61	58	45	58	97	81	78	57	73
Sorel, Que	56	36	36	30	29	187	136	153	125	128
Stratford, Ont	21	19	23	9	18	55	56	66	26	49
Sudbury, Ont	54	66	55	73	80	108	83	63	75	69
Sydney, N.S	40	26	24	18	18	77	44	41	30	31
Thetford Mines, Que	52	32	32	24	38	113	91	109	82	113
Three Rivers, Que	228	237	251	272	320	171	200	222	243	297
Timmins, Ont	60	57	53	55	74	123	101	84	80	91
Toronto, Ont	914	673	538	527	472	75	59	51	51	47
Valleyfield, Que	40	31	31	20	17	126	87	87	58	50
Vancouver, B.C	173	117	93	113	123	46	35	29	33	33
Verdun, Que	91	68	58	48	50	86	67	68	54	60
Victoria, B.C	33	23	19	19	27	46	33	27	27	36
Welland, Ont	20	19	13	18	15	69	66	42	58	48
Westmount, Que	11	33	30	29	25	102	105	112	139	102
Windsor, Ont.[1]	203	106	99	93	103	73	52	49	44	51
Winnipeg, Man	277	170	155	140	153	61	43	42	39	42
Woodstock, Ont	14	12	10	8	14	58	51	45	34	51

---

[1] Includes East Windsor, Sandwich, and Walkerville.

Infantile Mortality in Various Countries.—The rate of infantile mortality to live births has been greatly reduced in civilized countries by the recent advances in medical science and in sanitation. The low record is held at the present time by New Zealand, where in 1936 the rate of infantile mortality was only 31 per 1,000 live births as compared with 68 in 1905. The Netherlands, Australia, Norway, and Sweden, with rates of 39, 41, 42, and 43 in their latest available year (1936) were next in respect of low infantile mortality.

As showing the improvement in recent years, it may be stated that the rate of infantile mortality in England and Wales has been reduced from 128 per 1,000 live births in 1905 to 59 in 1936, while the rate in Germany has declined from 196 in 1904 to 66 in 1936. In the Netherlands, again, the rate has declined from 131 per 1,000 live births in 1905 to 39 in 1936. Statistics are given in Table 27 by leading countries and by provinces.

27.—Infantile Mortality per 1,000 Live Births in Various Countries of the World and Provinces of Canada in Recent Years.

Country or Province.	Year.	Rate of Infantile Mortality.	Country.	Year.	Rate of Infantile Mortality.
New Zealand	1936	31	Latvia	1936	80
Netherlands	1936	39	Scotland	1936	82
Australia	1936	41	Belgium	1936	86
Norway	1936	42	Estonia	1936	89
Sweden	1936	43	Austria	1936	93
Iceland	1936	47	Panama	1934	95
Switzerland	1936	47	Uruguay	1934	96
United States (reg. area)	1936	57	Italy	1936	100
England and Wales	1936	59	Spain	1935	109
Union of South Africa (Whites)	1936	59	Greece	1935	113
British Isles	1936	63	Newfoundland and Labrador	1936	113
Finland	1936	66	Japan	1936	117
Germany	1936	66	Palestine	1936	122
Denmark	1936	67	Czechoslovakia	1936	124
France	1936	67	Lithuania	1936	128
Irish Free State	1936	74	Jamaica	1936	130
Canada	**1937**	**76**	Salvador	1935	132
Ontario	1937	55	Hungary	1936	139
British Columbia	1937	56	Poland	1936	141
Alberta	1937	63	Bulgaria	1936	144
Manitoba	1937	64	Costa Rica	1936	153
Saskatchewan	1937	67	British India	1936	162
Nova Scotia	1937	70	Egypt	1936	164
Prince Edward Island	1937	73	Ceylon	1936	166
Quebec	1937	100	Straits Settlements	1936	171
New Brunswick	1937	101	Roumania	1936	175
Northern Ireland	1936	77	Chile	1936	252

Infantile Mortality in Certain Cities of the World.—It is one of the greatest triumphs of our time that city life is in our day, if not as healthy, yet not necessarily more dangerous to human, especially to infant, life than the average living conditions in the country as a whole.

To give particular examples, the rate of infantile mortality in New York was 45 per 1,000 live births in 1936, as against a rate of 57 per 1,000 for the birth registration area of the United States. In 1936, Berlin had an infantile mortality rate of 61 per 1,000 live births, as compared with 66 for Germany; Paris had a rate of 70 (Av. 1934-36), compared with a rate of 67 for France in 1936. On the other hand, in 1936, London had a rate of 66 compared with 59 for England and Wales.

In Canada, Montreal had, in 1936, an infantile mortality of 81 per 1,000 live births as compared with 83 for the province of Quebec. Toronto had, in 1936, an infantile mortality rate of 51 per 1,000 live births as against 55 for the province of Ontario, while Winnipeg and Vancouver had much lower infantile mortality rates than their respective provinces. Over a number of years both Vancouver and Victoria have shown two of the lowest infantile mortality rates in the world.

28.—Infantile Mortality per 1,000 Live Births in Certain Cities of the World in 1936.

City.	Country.	Rate of Infantile Mortality.	City.	Country.	Rate of Infantile Mortality.
Victoria	Canada	27	London	Canada	55
Oslo	Norway	29	Hamburg	Germany	56
Amsterdam	Netherlands	31[1]	Leipzig	Germany	56
Wellington	New Zealand	32	Halifax	Canada	59
Vancouver	Canada	33	Sheffield	England	60
Auckland	New Zealand	34	Breslau	Germany	60
Stockholm	Sweden	35[1]	Antwerp	Belgium	61[1]
Adelaide	Australia	35[2]	Berlin	Germany	61
Saskatoon	Canada	38	Birmingham	England	63
Winnipeg	Canada	39	London	England	66
Chicago	United States	39	Munich	Germany	66
Perth	Australia	39[1]	Cologne	Germany	66
Edmonton	Canada	41	Edinburgh	Scotland	68
Sydney	Australia	41[1]	Saint John	Canada	69
Brisbane	Australia	41[1]	Paris	France	70[1]
Hamilton	Canada	42	Washington	United States	72
Melbourne	Australia	43[2]	Hobart	Tasmania	73[2]
Windsor	Canada	44	Johannesburg	Union of South Africa	73
New York	United States	45	Liverpool	England	76
Capetown	Union of South Africa	46	Manchester	England	77
Moncton	Canada	47	Cork	Irish Free State	79
Dresden	Germany	48	Brandon	Canada	80
Copenhagen	Denmark	50[1]	Montreal	Canada	81
Frankfort-on-Main	Germany	51	Ottawa	Canada	88
Toronto	Canada	51	Quebec	Canada	101
Calgary	Canada	53	Glasgow	Scotland	109
Regina	Canada	53	Madras	British India	218
Verdun	Canada	54	Bombay	India	250

[1] Average annual rate 1934-36. [2] 1935 rate.

Maternal Mortality.—Of cognate interest with infantile mortality is the maternal mortality arising out of pregnancy and child-birth. This maternal mortality is shown by Table 29 to be at its lowest among mothers under twenty-five years of age. The mortality among mothers of different ages per 1,000 live births is shown for the years 1934-37; averages are also shown for the years 1926-30 and 1931-35. The maternal mortality is shown by provinces and age groups in Table **30** and by causes of death in Table **31**.

29.—Maternal Deaths in Canada, by Age Groups, with Rates per 1,000 Live Births, 1934-37, with Averages for 1926-30 and 1931-35.

Note.—Comparable figures for 1926-32 will be found at p. 208 of the 1934-35 Year Book, and for 1933 at p. 186 of the 1937 Year Book.

Age Group.	Year.	Living Births.	Maternal Deaths	
			No.	Rate per 1,000 Living Births.
Under 20 years..	1934	13,454	67	5·0
	1935	13,671	47	3·4
	1936	13,576	59	4·3
	1937	13,795	56	4·1
20-24 years.......	1934	55,137	211	3·8
	1935	56,245	202	3·6
	1936	56,627	230	4·1
	1937	57,818	177	3·1
25-29 years.......	1934	61,911	236	3·8
	1935	62,296	261	4·2
	1936	61,969	272	4·4
	1937	62,335	244	3·9
30-39 years......	1934	77,186	498	6·5
	1935	76,022	467	6·1
	1936	75,311	515	6·8
	1937	73,896	454	6·1
40 years or over	1934	13,615	155	11·3
	1935	13,217	116	8·7
	1936	12,888	157	12·2
	1937	12,391	140	11·3
Averages........	**1926-30**	**236,520**	**1,339**	**5·7**
Averages........	**1931-35**	**228,352**	**1,154**	**5·1**
Totals.....	**1934**	**221,303**	**1,167**	**5·3**
Totals.....	**1935**	**221,451**	**1,093**	**4·9**
Totals.....	**1936**	**220,371**	**1,233**	**5·6**
Totals.....	**1937**	**220,235**	**1,071**	**4·9**

30.—Maternal Deaths in each Province by Age Groups, 1937, with Totals and Rates per 1,000 Live Births for 1934-37, and Averages for 1926-30 and 1931-35.

Note.—For totals 1926-30, see p. 183 of the Canada Year Book, 1933, and for totals 1931-33, p. 182 of the 1936 edition.

Year and Age Group.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
Maternal Deaths—										
Averages, 1926-30............	8	61	64	433	398	81	126	105	63	1,339
Averages, 1931-35............	10	59	57	405	344	60	91	75	53	1,154
Totals, 1934.............	10	71	52	418	348	51	86	81	50	1,167
Totals, 1935.............	8	62	48	405	313	56	80	69	52	1,093
Totals, 1936.............	11	51	69	450	355	70	86	91	50	1,233
Totals, 1937.............	12	35	39	397	319	55	86	77	51	1,071
AGE GROUP, 1937.										
Under 20 years..................	1	5	Nil	14	22	5	5	3	1	56
20-24 years.......................	Nil	5	5	61	59	6	17	16	8	177
25-29 years.......................	5	8	11	91	70	14	22	13	10	244
30-39 years.......................	3	14	18	164	140	24	32	36	23	454
40 years or over..................	3	3	5	67	28	6	10	9	9	140
Age not stated....................	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Rates per 1,000 Live Births—										
Averages, 1926-30............	4·6	5·5	6·2	5·2	5·8	5·6	5·9	6·6	6·1	5·7
Averages, 1931-35............	5·1	5·1	5·5	5·1	5·3	4·4	4·5	4·5	5·3	5·1
Totals, 1934.............	5·1	6·2	5·1	5·5	5·6	3·8	4·4	5·0	5·1	5·3
Totals, 1935.............	4·0	5·3	4·6	5·4	5·0	4·2	4·1	4·3	5·2	4·9
Totals, 1936.............	5·6	4·3	6·6	6·0	5·7	5·4	4·5	5·8	4·7	5·6
Totals, 1937.............	5·7	3·0	3·7	5·2	5·2	4·3	4·6	4·8	4·5	4·9

[1] Exclusive of the Territories.

31.—Maternal Deaths in each Province, by Causes of Death, 1937.

Int. List No.	Cause of Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
140	Abortion with septic conditions....................	Nil	1	6	30	35	12	19	17	14	134
	(*a*) Abortion.............	"	1	5	29	24	10	15	11	7	102
	(*b*) Self-induced abortion	"	Nil	1	1	11	2	4	6	7	32
141	Abortion without mention of septic conditions (hæmorrhage included)......	"	"	Nil	8	10	3	1	4	Nil	26
	(*a*) Abortion.............	"	"	"	6	9	3	1	3	"	22
	(*b*) Self-induced abortion	"	"	"	2	1	Nil	Nil	1	"	4

---

[1] Exclusive of the Territories.

31.—Maternal Deaths in each Province, by Causes of Death, 1937—concluded.

Int. List No.	Cause of Death.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.[1]
142	Ectopic gestation..........	Nil	Nil	Nil	14	6	1	5	3	Nil	29
	(a) With septic conditions	"	"	"	4	Nil	Nil	Nil	Nil	"	4
	(b) Without mention of septic conditions.......	"	"	"	10	6	1	5	3	"	25
143	Other accidents of pregnancy (hæmorrhage excluded)..................	1	"	"	3	10	3	Nil	1	"	18
144	Puerperal hæmorrhage....	3	8	7	42	36	10	9	7	6	128
	(a) Placenta prævia......	1	6	3	22	19	5	3	2	2	63
	(b) Other hæmorrhages.	2	2	4	20	17	5	6	5	4	65
145	Puerperal septicæmia (not specified as due to abortion)....................	4	6	7	109	65	5	22	20	9	247
	(a) Puerperal septicæmia and pyæmia.........	4	6	7	108	65	5	22	20	9	246
	(b) Puerperal tetanus....	Nil	Nil	Nil	1	Nil	Nil	Nil	Nil	Nil	1
146	Puerperal albuminuria and eclampsia................	2	11	10	92	67	9	15	9	7	222
147	Other toxæmias of pregnancy..................	1	2	2	13	20	2	3	4	1	48
148	Puerperal phlegmasia alba dolens, embolism, or sudden death (not specified as septic)................	Nil	5	1	30	36	5	8	6	6	97
	(a) Phlegmasia alba dolens and thrombosis..	"	2	Nil	9	9	2	3	1	1	27
	(b) Embolism...........	"	3	1	13	22	2	2	3	2	48
	(c) Sudden death........	"	Nil	Nil	8	5	1	3	2	3	22
149	Other accidents of childbirth....................	1	2	6	53	30	4	4	4	8	112
	(a) Cæsarean operation..	Nil	1	Nil	5	9	Nil	1	1	4	21
	(b) Other surgical operations and instrumental delivery..............	"	Nil	"	2	4	1	1	Nil	Nil	8
	(c) Dystocia............	1	1	1	21	4	1	1	1	2	33
	(d) Rupture of uterus in parturition............	Nil	Nil	Nil	4	1	Nil	Nil	2	1	8
	(e) Others under this title	"	"	5	21	12	2	1	Nil	1	42
150	Other or unspecified conditions of the puerperal state.....................	"	"	Nil	3	4	1	Nil	2	Nil	10
	(a) Puerperal diseases of the breast............	"	"	"	Nil	Nil	Nil	"	Nil	"	Nil
	(b) Others under this title	"	"	"	3	4	1	"	2	"	10
	Totals.............	**12**	**35**	**39**	**397**	**319**	**55**	**86**	**77**	**51**	**1,071**

[1] Exclusive of the Territories.

As compared with the previous year, the number of maternal deaths shows a decrease of 162, or 13 p.c., but the decrease from 1930 is over 23 p.c. Decreases are shown for all provinces except Prince Edward Island, British Columbia, and Saskatchewan as compared with 1936 and in the last-named province the figure was the same as in 1936. By far the most serious causes of maternal mortality are puerperal septicæmia, and puerperal albuminuria and eclampsia (Int. List Nos. 140, 142*a*, 145, and 146), and deaths from these causes decreased from 687 in 1936 to 607 in 1937, or by 11·6 p.c.

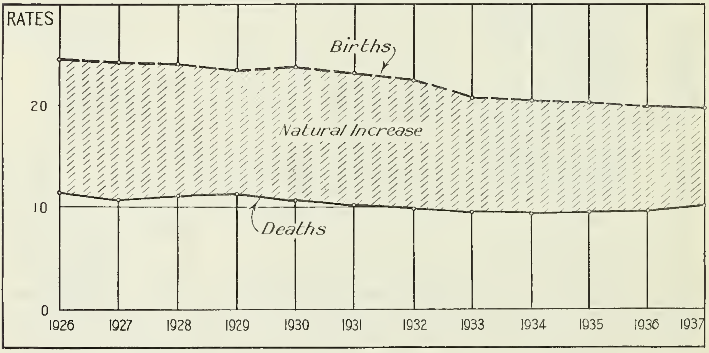
Section 4.—Natural Increase.

Summary statistics of the births, deaths, and natural increase (births minus deaths) per 1,000 of population are given for the years 1921 to 1937, by provinces, in Table **32**. Statistics of marriages are also included in this table for convenience. The province of Quebec is regarded as having one of the highest rates of natural increase per 1,000 population of any civilized area. The rate was 17·1 in 1931 and, while it has been appreciably reduced in line with common experience, it stood at

12·8 in 1937. Saskatchewan has usually approached Quebec in the matter of natural increase and for the years 1934 and 1935 the rates for this prairie province exceeded those for Quebec, although for 1936 and 1937 they were lower. Alberta and New Brunswick follow in the order given. In the case of the two western provinces the high rates of natural increase are due to their relatively younger populations and lower crude death rates, but in the case of New Brunswick the condition of an abnormally high birth rate combined with a high death rate exists. The high rates for these provinces brought the averages for Canada up to 10·6 in 1935, 10·3 in 1936, and 9·6 in 1937, in spite of the fact that the rate for British Columbia, which has always been low, was only 4·4 in 1937. The rate of natural increase in 1936 was 14·6 per 1,000 in the Union of South Africa (Whites), 7·8 in New Zealand, 7·7 in Australia, 5·2 in the Irish Free State, 5·8 in Northern Ireland, 4·5 in Scotland, and 2·7 in England and Wales, so that Canada compares quite favourably with most other British countries.

The rates of natural increase per 1,000 of the mean population for other countries in the latest years are as follows, the figures being for 1936: Netherlands, 11·5; Japan, 12·4; Italy, 8·7; Denmark, 6·8; Germany, 7·2; United States, 5·2; Finland, 5·0; Switzerland, 4·2; Norway, 4·2; Belgium, 2·4; Sweden, 2·2; France, −0·3.

BIRTH RATES, DEATH RATES AND RATES OF NATURAL INCREASE IN CANADA
1926-1937
RATES PER 1000 POPULATION
(EXCLUSIVE OF THE NORTHWEST TERRITORIES AND YUKON)



During recent years the rate of natural increase of the population of Canada has declined. In 1921 the rate was 17·8; it declined to 13·3 in 1926 and to 12·2 in 1929. After 1929 there was a temporary improvement but, as Table 32 shows, the rates for 1935, 1936, and 1937—10·6, 10·3, and 9·6, respectively—continued the downward trend. Among the provinces the trends generally follow that of Canada as a whole, except in the Maritime Provinces, for each of which the trend is not so regularly downward and has, in fact, been upward since 1934. Quebec shows the greatest improvement in death rate for the period since 1926. The birth rate is declining here as elsewhere and the rate of natural increase has shown a definitely downward trend, although not so markedly as that of Saskatchewan.

Statistics of natural increase in cities and towns of 10,000 population or over are given for the period 1926-37 in Table 33, but these are not worked out as rates per thousand of population, though the census populations in 1931, which are also given, furnish some guide to such rates.

32.—Summary of Births, Marriages, Deaths, and Natural Increase, by Provinces, for the calendar years 1935-37, with Averages for 1921-25, 1926-30, and 1931-35.

NOTE.—For other than census years birth, marriage, and death rates are calculated on estimated population (see p. 113). Figures for individual years 1921-25 will be found at p. 160 of the 1927-28 Year Book; for 1926-30 at p. 150 of the 1933 Year Book; for 1931-32 at p. 147 of the 1936 edition; and for 1933 and 1934 at p. 190 of the 1937 Year Book.

Province.	Births.	Birth Rate per 1,000 Population.	Marriages.	Marriage Rate per 1,000 Population.	Deaths.	Death Rate per 1,000 Population.	Excess of Births over Deaths.	Rate of Natural Increase per 1,000 Population.
Prince Edward Island. Av. 1921-25	1,966	22·6	473	5·4	1,085	12·5	881	10·1
Av. 1926-30	1,734	19·7	473	5·4	969	11·0	765	8·7
Av. 1931-35	1,961	22·1	496	5·6	1,001	11·3	961	10·8
1935	2,010	22·6	516	5·8	975	11·0	1,035	11·6
1936	1,977	21·5	595	6·5	1,024	11·1	953	10·4
1937	2,093	22·5	584	6·3	1,146	12·3	947	10·2
Nova Scotia..........Av. 1921-25	12,119	23·4	3,186	6·1	6,519	12·6	5,600	10·8
Av. 1926-30	11,016	21·4	3,224	6·3	6,362	12·4	4,654	9·0
Av. 1931-35	11,486	22·0	3,522	6·8	6,073	11·7	5,413	10·3
1935	11,617	22·0	3,946	7·5	6,164	11·7	5,453	10·3
1936	11,808	22·0	4,129	7·7	5,897	11·0	5,911	11·0
1937	11,572	21·4	4,337	8·0	6,083	11·2	5,489	10·1
New Brunswick.......Av. 1921-25	11,080	28·4	2,953	7·6	5,093	13·1	5,987	15·3
Av. 1926-30	10,327	25·8	2,970	7·4	5,019	12·5	5,308	13·3
Av. 1931-35	10,440	24·9	2,737	6·5	4,710	11·2	5,730	13·7
1935	10,388	24·2	3,200	7·5	4,779	11·1	5,609	13·1
1936	10,513	24·2	3,397	7·8	4,803	11·0	5,710	13·2
1937	10,580	24·0	3,671	8·3	5,433	12·3	5,147	11·7
Quebec[1]..............Av. 1926-30	82,771	30·5	18,731	6·9	36,645	13·5	46,126	17·0
Av. 1931-35	78,889	26·6	17,089	5·8	32,796	11·1	46,093	15·5
1935	75,267	24·6	19,967	6·5	32,839	10·7	42,428	13·9
1936	75,285	24·3	21,654	7·0	31,853	10·3	43,432	14·0
1937	75,635	24·1	24,876	7·9	35,456	11·3	40,179	12·8
Ontario................Av. 1921-25	71,454	23·7	24,037	8·0	34,252	11·3	37,202	12·4
Av. 1926-30	68,703	21·0	25,449	7·8	36,650	11·2	32,053	9·8
Av. 1931-35	65,000	18·3	24,260	6·8	35,782	10·1	29,218	8·2
1935	63,069	17·2	26,843	7·3	36,317	9·9	26,752	7·3
1936	62,451	16·9	27,734	7·5	37,571	10·2	24,880	6·7
1937	61,645	16·6	29,893	8·1	38,475	10·4	23,170	6·2
Manitoba..............Av. 1921-25	16,590	26·8	4,634	7·5	5,348	8·6	11,242	18·2
Av. 1926-30	14,391	21·7	4,951	7·5	5,507	8·3	8,884	13·4
Av. 1931-35	13,690	19·3	5,015	7·1	5,413	7·6	8,277	11·7
1935	13,335	18·8	5,341	7·5	5,781	8·1	7,554	10·7
1936	12,855	18·1	5,756	8·1	6,219	8·7	6,636	9·4
1937	12,888	18·0	6,113	8·5	6,070	8·5	6,818	9·5
Saskatchewan.........Av. 1921-25	21,580	27·7	4,982	6·4	5,859	7·5	15,721	20·2
Av. 1926-30	21,298	24·7	6,036	7·0	6,256	7·3	15,042	17·4
Av. 1931-35	20,325	21·9	5,680	6·1	6,037	6·5	14,288	15·4
1935	19,569	21·0	6,036	6·5	6,126	6·6	13,443	14·4
1936	19,125	20·5	6,168	6·6	6,314	6·8	12,811	13·7
1937	18,640	19·9	5,790	6·2	6,927	7·4	11,713	12·5
Alberta................Av. 1921-25	15,461	26·0	4,313	7·3	4,953	8·3	10,508	17·7
Av. 1926-30	15,924	24·2	5,265	8·0	5,530	8·4	10,394	15·8
Av. 1931-35	16,556	22·1	5,530	7·4	5,447	7·3	11,109	14·8
1935	16,183	21·2	6,010	7·9	5,729	7·5	10,454	13·7
1936	15,786	20·4	6,020	7·8	6,147	8·0	9,639	12·4
1937	15,903	20·4	6,345	8·2	6,261	8·0	9,642	12·4
British Columbia......Av. 1921-25	10,256	18·4	3,971	7·1	4,812	8·7	5,444	9·7
Av. 1926-30	10,356	16·2	4,786	7·5	5,986	9·3	4,370	6·9
Av. 1931-35	10,005	14·0	4,267	6·0	6,344	8·9	3,661	5·1
1935	10,013	13·6	5,034	6·8	6,857	9·3	3,156	4·3
1936	10,571	14·1	5,451	7·3	7,222	9·6	3,349	4·5
1937	11,279	15·0	6,191	8·2	7,973	10·6	3,306	4·4
Canada[1] (exclusive of the Territories)....Av. 1926-30	**236,520**	**24·1**	**71,885**	**7·3**	**108,924**	**11·1**	**127,596**	**13·0**
Av. 1931-35	**228,352**	**21·4**	**68,596**	**6·4**	**103,603**	**9·7**	**124,750**	**11·7**
1935	**221,451**	**20·3**	**76,893**	**7·0**	**105,567**	**9·7**	**115,884**	**10·6**
1936	**220,371**	**20·0**	**80,904**	**7·3**	**107,050**	**9·7**	**113,321**	**10·3**
1937	**220,235**	**19·8**	**87,800**	**7·9**	**113,824**	**10·2**	**106,411**	**9·6**

[1] Quebec was not included in the registration area prior to 1926.

33.—Natural Increase in Cities and Towns of 10,000 Population or Over, 1933-37, and Averages, 1926-30, and 1931-35.

Province and City or Town.	Census Population, 1931.	Averages.		1933.	1934.	1935.	1936.	1937.
		1926-30.	1931-35.					
Prince Edward Island—								
Charlottetown	12,361	23	99	85	90	102	128	83
Nova Scotia—								
Glace Bay	20,706	378	445	367	459	510	530	578
Halifax	59,275	573	732	708	680	805	884	773
Sydney	23,089	270	374	299	360	356	425	390
New Brunswick—								
Moncton	20,689	266	249	197	240	212	260	209
Saint John	47,514	432	536	401	585	578	575	542
Quebec—								
Chicoutimi	11,877	325	284	252	238	268	243	254
Granby	10,587	183	239	272	238	187	169	218
Hull	29,433	647	515	509	518	447	517	461
Joliette	10,765	174	157	159	115	166	126	99
Lachine	18,630	228	212	194	186	155	173	182
Lévis	11,724	84	42	57	41	23	25	14
Montreal	818,577	8,945	9,194	9,210	9,202	8,209	7,980	7,621
Outremont	28,641	19	−66	−72	−97	−94	−99	−141
Quebec	130,594	2,110	2,146	2,006	2,143	2,009	1,927	1,634
St. Hyacinthe	13,448	45	59	45	76	64	71	62
St. Jean	11,256	204	170	167	184	136	146	114
Shawinigan Falls	15,345	459	413	400	389	353	373	313
Sherbrooke	28,933	336	310	314	299	257	338	315
Sorel	10,320	130	124	117	121	75	111	108
Thetford Mines	10,701	308	212	159	232	136	145	128
Three Rivers	35,450	773	577	452	520	513	466	368
Valleyfield	11,411	137	204	179	215	212	171	166
Verdun	60,745	659	561	594	462	333	438	273
Westmount	24,235	−33	64	74	33	24	−60	−19
Ontario—								
Belleville	13,790	140	149	141	158	132	171	146
Brantford	30,107	300	265	254	225	247	263	213
Chatham	14,569	185	181	180	241	192	253	355
Cornwall	11,126	230	248	256	194	361	303	312
Fort William	26,277	420	355	337	288	314	266	278
Galt	14,006	105	109	81	93	81	98	126
Guelph	21,075	160	117	120	85	115	95	60
Hamilton	155,547	1,568	1,467	1,458	1,268	1,216	1,119	1,127
Kingston	23,439	119	181	240	157	155	186	251
Kitchener	30,793	451	405	339	417	393	359	342
London	71,148	292	359	262	332	377	306	391
Niagara Falls	19,046	251	221	192	203	250	182	197
North Bay	15,528	268	235	249	192	218	222	197
Oshawa	23,439	429	339	302	315	347	302	298
Ottawa	126,872	1,301	1,247	1,172	1,206	1,218	1,241	1,113
Owen Sound	12,839	171	138	137	159	133	144	120
Peterborough	22,327	271	253	277	192	248	247	267
Port Arthur	19,818	318	314	331	288	335	323	345
St. Catharines	24,753	279	306	292	334	247	266	249
St. Thomas	15,430	100	69	33	99	46	25	28
Sarnia	18,191	209	189	143	180	223	172	182
Sault Ste. Marie	23,082	395	360	377	279	303	316	260
Stratford	17,742	184	141	109	129	129	148	148
Sudbury	18,518	283	562	505	538	635	652	852
Timmins	14,200	345	392	382	420	449	497	593
Toronto	631,207	5,475	4,890	4,801	4,349	3,869	3,347	2,893
Welland	10,709	126	148	171	102	173	167	138
Windsor[1]	98,179	1,826	1,200	1,128	1,039	1,179	1,229	1,033
Woodstock	11,395	73	60	65	19	46	43	82
Manitoba—								
Brandon	16,461[2]	146	78	81	61	30	11	35
St. Boniface	16,275[2]	361	647	633	656	631	630	636
Winnipeg	215,814[2]	2,770	2,232	2,130	2,065	1,836	1,541	1,782

---

[1] Includes East Windsor, Sandwich, and Walkerville.

[2] Census of 1936.

33.—Natural Increase in Cities and Towns of 10,000 Population or Over, 1933-37, and Averages, 1926-30, and 1931-35—concluded.

Province and City or Town.	Census Population, 1931.	Averages.		1933.	1934.	1935.	1936.	1937.
		1926-30.	1931-35.					
Saskatchewan—								
Moose Jaw	19,805[1]	397	268	246	240	254	238	204
Prince Albert	11,049[1]	181	223	193	267	282	228	288
Regina	53,354[1]	887	802	717	783	661	610	761
Saskatoon	41,734[1]	573	505	463	404	405	402	315
Alberta—								
Calgary	83,407[1]	1,050	965	916	878	866	736	810
Edmonton	85,774[1]	1,260	1,362	1,215	1,265	1,330	1,217	1,523
Lethbridge	13,523[1]	251	338	319	246	390	391	403
British Columbia—								
New Westminster	17,524	252	271	249	267	254	284	380
Vancouver	246,593	1,601	1,056	949	968	782	703	998
Victoria	39,082	165	136	131	125	101	32	50

[1] Census of 1936.

Natural Increase, by Sex.—In Table 34 the relationship of births to deaths is shown by sex from 1926 to 1937 for Canada and for 1937 by provinces. In spite of higher male births, the natural increase is shown to be lower for males than females due to the higher mortality among the former.

34.—Births, Deaths, and Natural Increase in Canada,[1] by Provinces and for each Sex, 1937, with Totals, 1931-37 and Averages, 1926-30, and 1931-35.

Year and Province.	Males.			Females.			Both Sexes.
	Births.	Deaths.	Excess of Births over Deaths.	Births.	Deaths.	Excess of Births over Deaths.	Excess of Births over Deaths.
1937.							
PROVINCE.							
Prince Edward Island	1,108	604	504	985	542	443	947
Nova Scotia	6,071	3,244	2,827	5,501	2,839	2,662	5,489
New Brunswick	5,452	2,885	2,567	5,128	2,548	2,580	5,147
Quebec	38,985	18,694	20,291	36,650	16,762	19,888	40,179
Ontario	31,655	20,690	10,965	29,990	17,785	12,205	23,170
Manitoba	6,594	3,441	3,153	6,294	2,629	3,665	6,818
Saskatchewan	9,526	4,037	5,489	9,114	2,890	6,224	11,713
Alberta	8,027	3,661	4,366	7,876	2,600	5,276	9,642
British Columbia	5,725	4,853	872	5,554	3,120	2,434	3,306
Canada[1] Av. 1926-30	**121,552**	**58,351**	**63,201**	**114,968**	**50,573**	**64,395**	**127,596**
Av. 1931-35	**117,142**	**55,967**	**61,175**	**111,210**	**47,635**	**63,575**	**124,750**
Totals, 1931	**123,622**	**56,529**	**67,093**	**116,851**	**47,988**	**68,863**	**135,956**
Totals, 1932	**121,082**	**56,153**	**64,929**	**114,584**	**48,224**	**66,360**	**131,289**
Totals, 1933	**114,388**	**54,725**	**59,663**	**108,480**	**47,243**	**61,237**	**120,900**
Totals, 1934	**113,323**	**55,224**	**58,099**	**107,980**	**46,358**	**61,622**	**119,721**
Totals, 1935	**113,293**	**57,206**	**56,087**	**108,158**	**48,361**	**59,797**	**115,884**
Totals, 1936	**113,289**	**57,728**	**55,561**	**107,082**	**49,322**	**57,760**	**113,321**
Totals, 1937	**113,143**	**62,109**	**51,034**	**107,092**	**51,715**	**55,377**	**106,411**

[1] Exclusive of the Territories.

CHAPTER VI.—IMMIGRATION AND COLONIZATION.*

While the great majority of French Canadians can trace their descent to ancestors who left the Old World 250 years ago or even longer, most English-speaking Canadians are comparative newcomers both to Canada and to this continent, though a considerable number of the United Empire Loyalist families had been resident in the old colonies for generations before they moved north to establish English-speaking settlements in what is now the Dominion of Canada. During the middle third of the nineteenth century, a great English-speaking migration entered the province of Ontario and made it, for the first time, more populous than the sister province of Quebec, thus bringing about the agitation for representation by population. Thereafter, immigration slackened until the dawn of the twentieth century brought another flood of settlers to the newly opened territories of the great Northwest, resulting in an increase of population between the censuses of 1901 and 1911 greater than the combined increase of the three decades from 1871 to 1901.

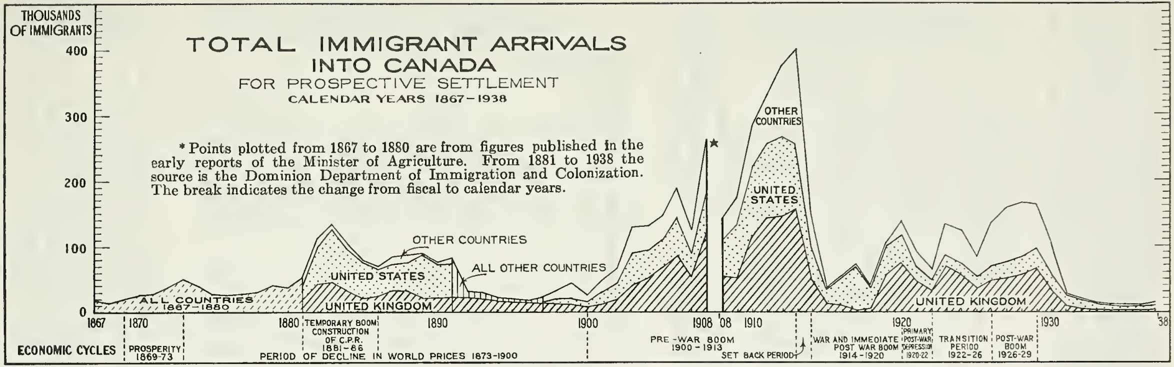
Immigration during the second decade of the twentieth century promised, at its commencement, to be even greater than during the first. In its first three years no fewer than 1,084,934 persons entered Canada for purposes of settlement, but the Great War, which commenced for Canada on Aug. 4, 1914, dried up the sources of our immigration in the United Kingdom and Continental Europe, where every able-bodied man was needed for the defence of his country. Immigrant arrivals from the United Kingdom in 1918 numbered only about 3,000, as compared with 150,000 in 1913; immigrant arrivals from Continental Europe numbered less than 3,000 in 1916, as compared with approximately 135,000 in 1914. Since the War, immigration to the Dominion has never approached that of the pre-war period.

Section 1.—Statistics of Immigration.

Immigration to Canada, as to other new countries, is generally greatest in "boom" periods, when capital as well as labour is leaving the older countries for the newer in order to secure the more remunerative investments generally to be found in virgin territories where the natural resources are still unexploited. In periods of depression, however, the sending abroad of both capital and labour is diminished, both preferring at such times to endure the ills which they know at home rather than take the risks of a new adventure at a distance. Indeed the depression which began about the close of 1929, with its accompanying unemployment and unsold surplus of farm products, raised the question whether it was desirable that Canada should accept immigrants in any considerable number. Therefore, the Government, on Aug. 14, 1930, passed an Order in Council whereby immigrants, except Britishers coming from the Mother Country or self-governing Dominions, and United States citizens coming from the United States, were allowed to come in only if they belonged to one of two classes—(*a*) wives and unmarried children under eighteen years of age, joining family heads established in Canada and in a position to look after their dependants; (*b*) agriculturists with sufficient money to begin farming in Canada. This limitation applies to the whole continent

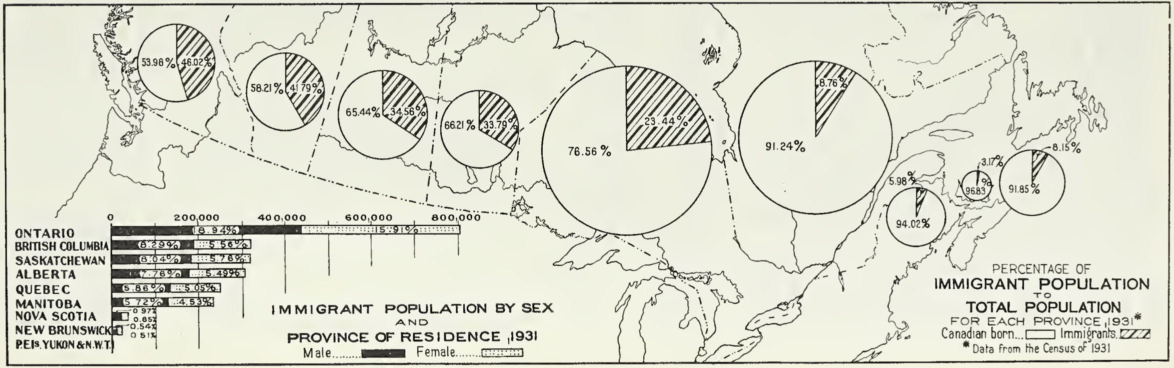
---

* Revised under the direction of F. C. Blair, Director of Immigration, Department of Mines and Resources, Ottawa.



TOTAL IMMIGRANT ARRIVALS INTO CANADA
FOR PROSPECTIVE SETTLEMENT
CALENDAR YEARS 1867–1938

* Points plotted from 1867 to 1880 are from figures published in the early reports of the Minister of Agriculture. From 1881 to 1938 the source is the Dominion Department of Immigration and Colonization. The break indicates the change from fiscal to calendar years.



PERCENTAGE OF IMMIGRANT POPULATION TO TOTAL POPULATION FOR EACH PROVINCE, 1931*
Canadian born ☐ Immigrants ▨
* Data from the Census of 1931

IMMIGRANT POPULATION BY SEX AND PROVINCE OF RESIDENCE, 1931
Male ■ Female ░

53.98%
46.02%
58.21%
41.79%
65.44%
34.56%
66.21%
33.79%
76.56%
23.44%
91.24%
8.76%
5.98%
94.02%
3.17%
96.83%
8.15%
91.85%
0
200,000
400,000
600,000
800,000
ONTARIO
18.94%
15.91%
BRITISH COLUMBIA
8.29%
5.56%
SASKATCHEWAN
8.04%
5.76%
ALBERTA
7.76%
5.49%
QUEBEC
5.86%
5.05%
MANITOBA
5.72%
4.53%
NOVA SCOTIA
0.97%
0.85%
NEW BRUNSWICK
0.54%
0.51%
P.E.Is. YUKON & N.W.T.

of Europe as well as to many other countries. Regulations affecting immigration from the British Isles, the British Dominions or the United States have not been changed but a policy of no solicitation has been rigidly adopted. In harmony with this policy the Department of Immigration and Colonization, during 1931, closed all its Canadian Government Information Bureaus in the United States and reduced its representation in the British Isles.

For many years the Immigration Regulations have contained a general provision that immigrants coming to Canada must have sufficient funds to look after themselves until employment is secured. Naturally, when employment is readily available a sum would be considered sufficient which would be insufficient in periods of unemployment, and the enforcement of this regulation is an important factor in reducing immigration at the present time. An Order in Council (Aug. 7, 1929), prohibiting the landing in Canada of any immigrant coming under contract or agreement, expressed or implied, to perform labour or service of any kind in Canada, is also in effect but this prohibition does not apply to farmers, farm labourers, or houseworkers. Under the Order, the Minister of Immigration and Colonization may admit any contract labourer if satisfied that his labour or service is required in Canada.

The number of immigrants coming to Canada is shown by calendar years from 1852 to 1938 in Table **1**, and the number of immigrant arrivals in Canada from the United Kingdom, the United States, and other countries, is given by years from 1908 in Table **2**.

1.—Numbers of Immigrant Arrivals in Canada, calendar years 1852-1938.

Year.	Number.	Year.	Number.	Year.	Number.	Year.	Number.
1852	29,307	1874	39,373	1896	16,835	1918	41,845
1853	29,464	1875	27,382	1897	21,716	1919	107,698
1854	37,263	1876	25,633	1898	31,900	1920	138,824
1855	25,296	1877	27,082	1899	44,543	1921	91,728
1856	22,544	1878	29,807	1900	41,681	1922	64,224
1857	33,854	1879	40,492	1901	55,747	1923	133,729
1858	12,339	1880	38,505	1902	89,102	1924	124,164
1859	6,300	1881	47,991	1903	138,660	1925	84,907
1860	6,276	1882	112,458	1904	131,252	1926	135,982
1861	13,589	1883	133,624	1905	141,465	1927	158,886
1862	18,294	1884	103,824	1906	211,653	1928	166,783
1863	21,000	1885	79,169	1907	272,409	1929	164,993
1864	24,779	1886	69,152	1908	143,326	1930	104,806
1865	18,958	1887	84,526	1909	173,694	1931	27,530
1866	11,427	1888	88,766	1910	286,839	1932	20,591
1867	14,666	1889	91,600	1911	331,288	1933	14,382
1868	12,765	1890	75,067	1912	375,756	1934	12,476
1869	18,630	1891	82,165	1913	400,870	1935	11,277
1870	24,706	1892	30,996	1914	150,484	1936	11,643
1871	27,773	1893	29,633	1915	36,665	1937	15,101
1872	36,578	1894	20,829	1916	55,914	1938	17,244
1873	50,050	1895	18,790	1917	72,910		

Sex and Conjugal Condition of Immigrants.—As shown by Table **3**, the 15,101 immigrants who came to Canada in the calendar year 1937 included 6,300 males and 8,801 females, males constituting only 41·7 p.c. of the total, as compared with 41·4 p.c. in 1936. Prior to 1932 males normally exceeded females, as shown on p. 213 of the 1934-35 edition of the Year Book, where figures for the fiscal years 1911-34 will be found. Similar information for the calendar years 1929-37 is given in Table **4**.

2.—Numbers of Immigrant Arrivals in Canada from the United Kingdom, the United States, and Other Countries, calendar years 1908-38.

Note.—The 1936 edition of the Year Book showed, at p. 186, statistics of immigration on this basis, by calendar years from 1881 to 1900 and by fiscal years from 1901 to 1935.

Year.	Immigrant Arrivals from—			Total.	Year.	Immigrant Arrivals from—			Total.
	United Kingdom.	United States.	Other Countries.			United Kingdom.	United States.	Other Countries.	
1908	55,727	51,750	35,849	143,326	1924	57,612	16,042	50,510	124,164
1909	52,344	80,409	40,941	173,694	1925	35,362	17,717	31,828	84,907
1910	112.638	108,350	65,851	286,839	1926	48.819	20,944	66,219	135,982
1911	144,076	112,028	75,184	331,288	1927	52,940	23,818	82,128	158,886
1912	145,859	120,095	109,802	375,756	1928	55,848	29,933	81,002	166,783
1913	156,984	97,783	146,103	400,870	1929	66,801	31,852	66,340	164,993
1914	49,879	50,213	50,392	150,484	1930	31,709	25,632	47,465	104,806
1915	9,606	24,297	2,762	36,665	1931	7,678	15,195	4,657	27,530
1916	8,596	41,779	5,539	55,914	1932	3,327	13,709	3,555	20,591
1917	2.632	65,737	4,541	72,910	1933	2,304	8,500	3,578	14,382
1918	4,484	31,769	5,592	41,845	1934	2,166	6,071	4,239	12,476
1919	57,251	42,129	8,318	107,698	1935	2,103	5,291	3,883	11,277
1920	75,804	40,188	22,832	138,824	1936	2,197	4,876	4,570	11,643
1921	43,772	23,888	24,068	91,728	1937	2,859	5,555	6,687	15,101
1922	31,005	17,534	15,685	64,224	1938	3.389	5,833	8,022	17,244
1923	70,110	16,716	46,903	133,729					

3.—Sex and Conjugal Condition of Immigrants into Canada, by Age Groups, calendar years 1936 and 1937.

Year and Age Group.	Males.					Females.				
	Single.	Married.	Widowed.	Divorced.	Total.	Single.	Married.	Widowed.	Divorced.	Total.
1936.										
0-14	1.846	Nil	Nil	Nil	1,846	1,735	Nil	Nil	Nil	1,735
15-19	383	"	"	"	383	435	74	1	"	510
20-24	291	45	2	"	338	367	393	1	3	764
25-29	248	187	1	1	437	252	628	5	10	895
30-39	180	552	5	7	744	224	1,248	32	19	1,523
40-49	67	420	15	7	509	77	462	45	10	594
50 or over	70	395	92	4	561	98	352	345	9	804
Totals, 1936	**3,085**	**1,599**	**115**	**19**	**4,818**	**3,188**	**3,157**	**429**	**51**	**6,825**
1937.										
0-14	2,255	Nil	Nil	Nil	2,255	2,248	Nil	Nil	Nil	2,248
15-19	602	3	"	"	605	632	106	"	"	738
20-24	393	54	1	"	448	417	454	2	1	874
25-29	332	290	1	3	626	313	749	12	12	1,086
30-39	242	782	11	12	1,047	259	1,646	44	25	1,974
40-49	91	539	11	8	649	128	666	83	19	896
50 or over	69	473	113	15	670	122	410	439	14	985
Totals, 1937	**3,984**	**2,141**	**137**	**38**	**6,300**	**4,119**	**4,031**	**580**	**71**	**8,801**

4.—Sex Distribution of Immigrants as Adult Males, Adult Females, and Children, calendar years 1929-37.

Year.	Adult Males.	Adult Females.	Children under 18.		Total.
			Males.	Females.	
1929	75,814	47,425	23,213	18,541	164,993
1930	44,078	32,882	15,521	12,325	104,806
1931	7,280	9,728	5,645	4,877	27,530
1932	5,429	7,259	4,238	3,665	20,591
1933	3,691	5,749	2,500	2,442	14,382
1934	2,998	5,107	2,161	2,210	12,476
1935	2,550	4,593	2,106	2,028	11,277
1936	2,691	4,830	2,127	1,995	11,643
1937	3,573	6,126	2,727	2,675	15,101

Racial Origins of Immigrants.—Where there is any considerable immigration into a democratic country, the racial and linguistic composition of the immigrants is of great importance. Canadians prefer that settlers should be of a readily assimilable type, already identified by race or language with one or other of the two great races now inhabiting this country and prepared for the duties of Canadian citizenship. Since the French are not, to any great extent, an emigrating people, this means in practice that the great bulk of the preferable settlers are those who speak the English language—those coming from the United Kingdom or the United States. Next in order of readiness of assimilation are the Scandinavians, Dutch, and Germans, who readily learn English and are already acquainted with the working of democratic institutions. Settlers from Southern and Eastern Europe, however desirable from a purely economic point of view, are less readily assimilated, and the Canadianizing of the people who have come to Canada from these regions in the present century is a problem both in the agricultural Prairie Provinces and in the cities of the East. Less assimilable still, are those who come to Canada from the Orient. On the whole, the great bulk of Canadian immigration of the past generation has been drawn from the English-speaking countries and from those Continental European countries where the population is ethnically closely related to the British, though for some years there was an increasing immigration of Slavs.

The racial origins of the immigrants who arrived in Canada in the calendar years 1926-37 are shown in Table 5. In the latest year the British races contributed 41 p.c. of the immigrants and the French 6 p.c.

5.—Racial Origins of Immigrants into Canada, calendar years 1926-37.

NOTE.—Dashes in this table indicate that no immigrants were reported under the corresponding stub items.

Racial Origin.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
British—												
English	30,593	34,056	37,662	43,287	24,789	9,417	6,461	4,301	3,491	3,089	3,049	3,736
Irish	11,425	11,857	12,523	14,478	7,876	2,748	1,886	1,316	1,021	895	854	1,017
Scottish	16,339	17,569	18,532	23,207	11,996	3,825	2,612	1,700	1,198	1,204	1,133	1,314
Welsh	1,568	2,204	3,316	3,586	1,116	371	184	126	115	88	105	102
Totals, British	59,925	65,686	72,033	84,558	45,777	16,361	11,143	7,443	5,825	5,276	5,141	6,169
Continental European—												
Albanian	11	38	38	22	33	5	–	–	4	1	4	9
Belgian	1,922	2,448	1,341	952	427	97	81	50	78	100	94	111
Bohemian	112	80	90	104	76	22	24	12	10	7	13	12
Bulgarian	88	243	267	311	353	17	16	15	5	13	23	32
Croatian	1,138	963	1,108	751	604	118	95	107	152	158	232	262
Czech	778	726	987	440	261	78	77	54	76	113	124	182
Dalmatian	–	–	1	7	–	–	–	–	–	–	1	–
Dutch	2,204	2,631	2,255	1,980	1,605	308	247	190	150	172	211	221
Estonian	77	111	108	98	87	9	1	3	2	3	5	3
Finnish	4,811	5,167	3,758	4,712	2,811	136	62	67	79	64	61	94
French	2,882	3,834	4,605	5,187	5,084	2,938	2,832	1,337	903	840	833	871
German	13,791	15,845	17,964	17,919	13,544	2,389	1,842	1,213	945	725	792	1,137
Greek	319	610	770	741	575	66	71	53	58	67	92	110
Herzegovinian	3	4	–	–	–	–	–	–	–	–	–	–
Italian	2,683	4,617	1,114	1,514	1,327	633	435	365	375	392	349	481
Jewish	4,867	5,184	4,059	4,001	4,220	670	747	781	869	803	659	559
Lettish	58	81	78	83	36	2	8	3	1	2	5	10
Lithuanian	792	893	1,799	959	624	65	49	44	45	25	51	44
Magyar	5,262	5,875	6,366	5,484	3,360	530	333	506	442	344	334	573
Maltese	35	38	26	41	22	5	6	–	–	–	4	3
Mexican	3	1	–	–	–	1	–	–	–	1	6	1
Montenegrin	1	4	–	2	3	–	–	–	–	–	–	2
Moravian	22	50	7	21	5	1	3	–	–	–	–	3
Polish	5,552	8,481	8,583	6,424	5,207	680	474	410	436	447	414	675
Portuguese	21	7	22	28	11	5	9	5	5	5	4	5
Roumanian	358	248	336	400	300	48	38	38	44	43	61	91
Russian	1,261	1,280	1,245	858	1,123	111	104	82	70	99	94	144
Ruthenian	9,534	10,899	16,080	11,009	8,133	541	482	390	578	483	815	1,215

5.—Racial Origins of Immigrants into Canada, calendar years 1926-37—concluded.

Racial Origin.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Continental European–con.												
Scandinavian—												
Danish........	1,696	4,032	4,092	3,140	1,421	175	116	82	63	54	63	81
Icelandic......	57	50	49	35	40	10	12	10	12	11	4	6
Norwegian.....	3,820	6,415	3,707	3,750	1,808	262	275	144	132	122	101	113
Swedish.......	3,011	3,866	4,284	3,895	1,440	276	225	126	100	113	81	138
Serbian..........	854	586	416	387	208	50	51	35	38	28	40	80
Slovak...........	4,024	4,256	4,466	2,617	2,645	344	262	408	594	415	571	1,173
Spanish..........	49	45	62	62	36	26	23	12	15	12	22	16
SpanishAmerican	6	2	6	5	2	1	2	4	–	–	–	4
Swiss............	588	818	621	652	340	72	57	46	43	55	60	110
Turkish..........	6	9	7	7	8	2	–	2	1	–	1	1
Yugoslavic......	2,205	1,640	2,915	973	521	78	59	68	104	119	109	130
Totals, Continental European........	74,901	92,077	93,632	79,571	58,300	10,771	9,118	6,662	6,429	5,836	6,333	8,702
Non-European—												
American Indian.	13	26	21	25	8	29	24	10	6	2	2	11
Arabian..........	8	8	1	4	7	1	2	–	1	2	–	3
Armenian........	79	66	20	33	28	6	5	10	3	5	6	6
Chinese..........	–	2	1	1	–	–	1	1	1	–	–	1
East Indian......	70	56	56	49	80	52	61	36	33	26	13	11
Japanese.........	443	511	535	180	218	174	119	106	126	70	103	146
Korean..........	1	–	–	–	–	–	–	–	–	–	–	–
Negro............	302	313	359	464	294	104	71	80	25	28	18	27
Persian..........	4	6	1	1	1	1	1	–	–	–	1	3
Syrian...........	236	135	124	107	93	31	46	34	27	32	26	22
Totals, Non-European...	1,156	1,123	1,118	864	729	398	330	277	222	165	169	230
Grand Totals.....	**135,982**	**158,886**	**166,783**	**164,993**	**104,806**	**27,530**	**20,591**	**14,382**	**12,476**	**11,277**	**11,643**	**15,101**

Assimilation of Immigrants.*—A sidelight on the question of the assimilation of immigrants is shown by Table 6, the statistics of which are taken from Volume I of the Census of 1931. These figures show the racial origins of the population, by country of birth, and the leading races with which males intermarry. The upper part of the table is interesting inasmuch as it shows the degree to which non-British stocks are becoming basic parts of the population, almost 80 p.c. of the persons of Dutch racial origin, for instance, being now Canadian-born.

The lower part indicates the varying tendencies towards intermarriage of persons of different racial origins. By 1931, 37·8 p.c. of the married men and 37·6 p.c. of the married women of North Western European origins had married outside their respective stocks, as against 18·4 p.c. of the men and 18·0 p.c. of the women of Southern, Eastern, and Central European stocks. Thus the North Western Europeans as a group had intermarried with others over twice as much as the Eastern and Central Europeans. Of the linguistic groups, the Scandinavians had married out to the greatest extent—approximately 54 p.c. for the men and 52 p.c. for the women; the Germanic peoples ranked second with 32 and 33 p.c. Only 25·9 p.c. of the men of Latin and Greek origin had crossed the racial line in marriage and 11·8 p.c. of the women; for the Slavs the figures were 17·6 and 19·4 p.c., respectively. The progress of intermarriage has thus proceeded much further with the Scandinavian and Germanic origins than with the Slavic and Latin and Greek. Many stocks have scarcely intermarried at all.

---

* For further information on this subject, the reader is referred to Census Monograph No. 4 "Racial Origins and Nativity of the Canadian People", which may be obtained from the King's Printer, Ottawa, price 35 cents.

6.—The Cumulative Effects of Immigration on the Racial Composition of the Population: Percentages of each Origin Born in Leading Countries and Leading Races with which the Males have Intermarried, 1931.

Racial Origin.	Population.	Order of Importance by Country of Birth.							
		Principal.		Second.		Third.		Fourth.	
		Country of Birth.	p.c.	Country of Birth.	p.c.	Country of Birth.	p.c.	Country of Birth.	p.c.
English	2,741,419	Canada	70·0	England	24·9	United States	3·1	Newfoundland	0·7
Irish	1,230,808	Canada	85·6	Ireland	8·2	United States	3·8	England	1·1
Scottish	1,346,350	Canada	76·0	Scotland	19·4	United States	2·8	England	1·2
Welsh, etc.	62,494	Canada	58·2	Wales	26·8	England	6·1	United States.	5·9
Belgian	27,585	Belgium	54·9	Canada	40·6	United States	2·5	France	1·0
Dutch	148,962	Canada	79·9	Holland	6·9	United States	6·5	Russia	5·8
French	2,927,990	Canada	97·4	United States	1·9	France	0·5	England	0·1
Italian	98,173	Canada	53·1	Italy	43·1	United States	2·1	Other Br. Poss.	0·5
Danish	34,118	Denmark	49·1	Canada	37·4	United States	11·4	England	0·6
Icelandic	19,382	Canada	65·4	Iceland	29·0	United States	5·2	Ireland	0·1
Norwegian	93,243	Canada	42·1	Norway	34·2	United States	23·0	Sweden	0·3
Swedish	81,306	Canada	42·6	Sweden	41·5	United States	13·2	Finland	1·1
Austrian, *n.o.s.*	48,639	Canada	53·7	Austria	33·0	Poland	4·2	Roumania	2·5
Bulgarian	3,160	Bulgaria	42·5	Canada	33·5	Greece	20·0	Yugoslavia	2·1
German	473,544	Canada	69·5	United States	9·5	Germany	7·9	Russia	6·0
Hungarian	40,582	Hungary	61·9	Canada	27·8	Czechoslovakia.	3·3	Roumania	3·0
Roumanian	29,056	Canada	50·7	Roumania	44·7	Austria	1·3	United States	1·0
Yugoslavic	16,174	Yugoslavia	74·3	Canada	20·0	United States	1·5	Czechoslovakia.	1·0
Czech and Slovak	30,401	Czechoslovakia.	62·0	Canada	27·8	United States	4·0	Poland	1·7
Finnish	43,885	Finland	66·7	Canada	28·2	United States	3·4	Other Europe	1·1
Lithuanian	5,876	Lithuania	63·0	Canada	28·4	England	2·1	United States	1·5
Polish	145,503	Poland	48·6	Canada	47·0	United States	1·3	Austria	1·2
Russian	88,148	Canada	54·0	Russia	36·8	United States	3·5	Poland	3·1
Ukrainian	225,113	Canada	57·0	Poland	26·5	Ukraine	5·4	Roumania	4·7
Greek	9,444	Greece	51·4	Canada	43·0	United States	1·9	Turkey	1·8
Hebrew	156,726	Canada	43·8	Russia	25·8	Poland	15·9	Roumania	4·9
Chinese	46,519	China	88·3	Canada	11·6	United States	0·1	—	–
Japanese	23,342	Japan	51·3	Canada	48·5	United States	0·1	—	–
Hindu	1,400	India	80·0	Canada	16·4	Other Br. Poss.	1·1	Hungary	0·8
Syrian	10,753	Canada	59·4	Syria	35·7	United States	2·0	Other Asia	1·3
Indian	122,911	Canada	99·3	United States	0·7	—	–	—	–
Negro	19,456	Canada	79·6	United States	11·4	West Indies	7·5	Other Br. Poss.	0·6

Racial Origin of Male.	Order of Importance by Race of Wife.[1]							
	Principal.		Second.		Third.		Fourth.	
	Race of Wife.	p.c.	Race of Wife.	p.c.	Race of Wife.	p.c.	Race of Wife.	p.c.
English	English	69·9	Scottish	11·8	Irish	8·7	French	3·8
Irish	Irish	43·3	English	23·8	Scottish	16·7	French	8·4
Scottish	Scottish	45·0	English	28·5	Irish	14·9	French	4·1
Welsh, etc.	English	39·6	Welsh	18·6	Scottish	16·7	Irish	12·4
Belgian	Belgian	56·8	French	19·3	English	7·4	Scottish	3·6
Dutch	Dutch	53·3	English	17·4	Scottish	9·6	Irish	8·3
French	French	95·0	English	1·7	Irish	1·5	Scottish	0·8
Italian	Italian	78·0	French	8·2	English	5·0	Irish	2·6
Danish	Danish	43·7	English	19·3	Scottish	9·3	Irish	6·5
Icelandic	Icelandic	61·8	English	11·5	Scottish	8·0	Irish	5·3
Norwegian	Norwegian	50·1	English	14·6	Scottish	8·4	Swedish	6·7
Swedish	Swedish	40·7	English	17·2	Norwegian	10·0	Scottish	8·2
Austrian, *n.o.s.*	Austrian	77·6	German	4·3	Ukrainian	3·9	English	3·0
Bulgarian	Bulgarian	39·3	English	20·8	French	10·7	Ukrainian	7·3
German	German	72·5	English	9·2	Irish	5·0	Scottish	4·6
Hungarian	Hungarian	90·7	German	2·8	English	0·9	French	0·7
Roumanian	Roumanian	68·7	Ukrainian	6·4	Polish	4·6	English	3·5
Yugoslavic	Yugoslavic	84·4	English	2·7	Ukrainian	2·1	Polish	1·7
Czech and Slovak.	Czech and Slovak.	78·8	Polish	3·8	English	2·8	German	2·8
Finnish	Finnish	88·9	English	3·5	Scottish	1·6	Irish	1·2
Lithuanian	[2]		[2]		[2]		[2]	
Polish	Polish	78·6	Ukrainian	10·7	German	1·9	French	1·8
Russian	Russian	72·5	German	5·1	Ukrainian	4·5	Polish	4·0
Ukrainian	Ukrainian	90·6	Polish	5·5	Roumanian	0·6	Austrian	0·5
Greek	Greek	58·5	English	12·3	French	8·7	Irish	5·0
Hebrew	Hebrew	96·8	English	0·9	Irish	0·4	French	0·4
Chinese	Chinese	85·6	English	4·0	French	2·7	Polish	1·4
Japanese	Japanese	99·3	English	0·3	Irish	0·1	Scottish	0·1
Hindu	Hindu	90·2	English	2·3	Scottish	2·3	Ukrainian	2·3
Syrian	Syrian	73·4	French	9·8	English	6·3	Scottish	3·3
Indian	Indian	94·8	French	2·1	English	1·5	Scottish	0·5
Negro	Negro	90·4	English	3·2	French	1·6	Irish	1·2

[1] From racial origins of parents of 1929-31 average of live births.

[2] Not given.

Languages of Immigrants.—The languages of immigrants ten years old or over, arriving *via* ocean ports and from the United States, are shown for the calendar years 1931-37, in Table 7. English-speaking immigrants constituted 54 p.c. of the total in 1937, and French-speaking immigrants nearly 4 p.c.

7.—Languages of Immigrants, Ten Years of Age or Over, calendar years 1931-37.

NOTE.—Dashes in this table indicate that no immigrants were reported under the corresponding stub item.

Language.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
English	15,869	11,037	7,524	6,059	5,367	5,397	6,643
French	1,028	992	562	467	507	485	478
German	624	506	378	370	274	282	511
Norwegian	68	74	34	33	29	36	25
Swedish	72	65	21	23	18	15	41
Danish	56	45	44	19	21	19	38
Icelandic	-	6	5	4	2	-	-
Flemish	36	36	23	45	53	43	62
Dutch	39	33	21	36	26	53	58
Finnish	71	34	36	44	37	36	65
Estonian	5	3	1	1	3	3	-
Lettish	3	2	4	-	-	3	7
Lithuanian	36	30	29	24	22	38	43
Russian	51	36	50	54	32	36	42
Hebrew[1]	266	215	223	137	158	197	110
Ruthenian Russniak Ukrainian	211	164	149	205	184	266	401
Polish	421	390	505	688	707	793	1,215
Roumanian	39	32	29	45	64	65	103
Slovenian	10	-	3	-	-	3	2
Czech (Bohemian)	224	192	269	433	356	490	989
Croatian (Serbian)	111	120	114	189	214	305	438
Hungarian (Magyar)	300	211	314	290	234	265	436
Italian	420	273	227	261	265	245	367
Spanish	14	24	19	6	7	9	11
Portuguese	-	1	1	-	-	-	-
Greek	52	49	42	42	44	56	76
Albanian	4	-	-	1	1	3	7
Turkish	1	-	-	-	-	4	1
Bulgarian	17	11	10	6	10	13	27
Chinese	-	1	1	1	-	-	1
Japanese	161	112	104	117	66	96	130
East Indian	48	48	30	29	21	10	8
Armenian (Aramaic)	4	10	3	1	1	5	3
Syrian (Arabic)	15	20	16	10	13	15	16
Totals	**20,276**	**14,772**	**10,791**	**9,640**	**8,736**	**9,286**	**12,354**

[1] Includes those speaking Yiddish.

Nationalities of Immigrants.—In the calendar year 1937 the percentage of British subjects immigrating to Canada was 26·6, while that of United States citizens was 31. In 1930, when total immigration was over eight times that of the latest year, the proportions were 34 p.c. and 21 p.c., respectively. The third largest group, comprising immigrants of Polish nationality, dropped from 16 p.c. in 1930 to 13·7 p.c. in 1937. Table 8 shows the nationalities of immigrants for the seven latest years.

8.—Nationalities of Immigrants, calendar years 1931-37.

Note.—Dashes in this table indicate that no immigrants were reported under the corresponding stub item.

Nationality.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
African (not British)	–	–	–	–	–	–	1
Albanian	4	–	1	1	1	4	8
Arabian	1	–	1	–	8	–	–
Argentinian	3	1	5	1	–	–	1
Armenian	–	1	1	–	1	–	–
Austrian	67	45	46	30	29	40	40
Belgian	56	46	34	62	79	93	108
Brazilian	2	1	2	1	5	–	2
British	9,794	15,163	3,630	3,151	3,052	3,171	4,020
Bulgarian	11	9	9	6	13	15	30
Chilean	–	1	–	1	–	–	–
Chinese	–	1	1	1	–	–	1
Colombian	–	6	–	–	–	–	–
Costa Rican	–	1	1	–	–	–	–
Cuban	2	1	5	1	–	7	1
Czechoslovakian	544	450	581	857	647	771	1,469
Danish	78	52	50	24	24	18	37
Danziger	2	–	–	1	–	–	1
Dominican	–	–	1	–	–	–	–
Dutch	36	32	29	42	31	60	63
Ecuadorian	–	2	–	–	–	1	–
Egyptian	–	–	–	–	–	–	1
Estonian	10	3	–	1	3	5	2
Finnish	111	42	45	62	39	49	96
French	77	75	55	58	69	96	88
German	408	312	185	119	98	72	155
Greek	29	36	26	39	42	77	91
Guatemalan	1	–	–	–	–	–	–
Haitian	–	1	–	–	–	–	–
Honduran	–	–	–	–	1	–	2
Hungarian	436	274	418	378	250	247	391
Icelandic	2	5	5	3	6	37	–
Italian	466	269	241	295	277	281	348
Japanese	112	98	98	110	56	78	111
Korean	–	–	1	–	–	–	–
Latvian	6	7	10	1	10	2	10
Lithuanian	90	79	51	50	25	73	44
Luxemburger	–	–	–	–	2	–	–
Mexican	3	–	4	4	42	49	25
Norwegian	67	65	35	30	25	–	22
Panamanian	2	1	3	1	–	1	–
Paraguayan	–	–	1	–	–	–	–
Persian	–	1	5	–	–	–	–
Peruvian	3	2	–	–	–	–	2
Polish	1,244	1,070	1,042	1,337	1,336	1,552	2,070
Roumanian	230	153	173	183	215	168	295
Russian	52	50	78	48	23	30	17
South American	–	–	1	–	–	–	–
Spanish	5	1	–	3	5	10	7
Swedish	55	40	22	15	27	11	18
Swiss	50	30	31	29	40	65	202
Syrian	12	21	12	14	14	12	10
Turkish	3	1	4	–	1	3	3
Ukrainian	3	5	3	–	–	–	–
United States	13,154	1,901	7,194	5,225	4,474	4,122	4,699
Uruguayan	–	1	1	–	–	–	–
Venezuelan	–	2	–	–	1	–	–
West Indian (not British)	1	–	–	–	1	–	–
Yugoslavic	298	234	241	292	305	423	610
Totals	**27,530**	**20,591**	**14,382**	**12,476**	**11,277**	**11,643**	**15,101**

Countries of Birth of Immigrants.—In Table 9 will be found the countries of birth of the immigrants into Canada in the calendar years 1931-37. The figures show that the United States with 4,180 was the birthplace of more of the 1937 immigrants than any other single country. This has been the case since 1930. In 1937 Poland came second with 2,095, England third with 1,603, and Czechoslovakia fourth with 1,456.

9.—Countries of Birth of Immigrants, calendar years 1931-37.

NOTE.—Dashes in this table indicate that no immigrants were reported under the corresponding stub item.

Country of Birth.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Africa (British)	54	37	30	19	21	23	30
Africa (not British)	9	5	3	5	14	1	3
Albania	5	–	1	2	1	4	9
Argentina	10	3	11	3	4	2	3
Armenia	1	1	–	–	–	–	1
Asia	10	3	6	6	21	9	13
Australia	93	56	36	40	27	24	35
Austria	99	75	53	54	47	47	50
Belgium	82	67	45	71	97	101	122
Brazil	16	6	6	3	14	3	4
Bulgaria	11	9	14	5	12	18	27
Canada	1,105	1,139	779	580	543	553	546
Central America	9	3	2	–	2	4	8
Chile	4	2	1	3	–	1	2
China	30	29	23	26	29	29	37
Czechoslovakia	539	448	591	855	646	760	1,456
Danzig	1	2	–	7	–	–	1
Denmark	84	60	58	30	33	27	41
Egypt	–	–	–	–	–	–	4
England	4,938	2,802	1,720	1,405	1,320	1,289	1,603
Estonia	10	4	1	2	5	3	2
Finland	118	50	56	68	49	52	104
France	101	102	69	64	78	100	102
Germany	447	348	213	147	122	114	214
Greece	58	60	40	47	59	83	106
Guiana (British)	10	6	5	6	6	7	2
Holland	41	41	32	36	32	73	66
Hungary	456	282	429	387	260	262	412
Iceland	2	8	6	5	7	1	4
India (British)	134	107	81	63	61	42	40
Ireland (Free State)	363	193	144	135	120	127	135
Ireland (Northern)	647	269	181	203	147	130	184
Italy	516	331	290	338	346	314	433
Japan	183	125	113	129	75	104	163
Korea	–	2	2	6	4	2	–
Latvia	9	17	12	6	10	6	13
Lesser British Isles	37	18	17	5	4	8	8
Lithuania	89	88	50	54	29	72	56
Malta	6	3	–	–	3	–	2
Mexico	7	14	11	7	53	76	66
Newfoundland	416	310	287	308	325	393	566
New Zealand	36	20	20	13	17	12	11
Norway	101	94	47	39	44	46	42
Persia	2	–	–	–	1	1	2
Poland	1,307	1,134	1,075	1,369	1,351	1,599	2,095
Portugal	2	1	1	4	–	–	–
Roumania	246	162	184	186	211	171	307
Russia	191	153	166	119	78	78	91
St. Pierre and Miquelon	4	1	1	9	6	12	7
Scotland	2,391	1,182	778	538	547	569	642
South America	10	20	8	6	12	5	17
Spain	8	2	2	5	1	8	7
Sweden	97	63	37	28	42	22	35
Switzerland	55	32	41	28	48	67	200
Syria	23	26	21	20	18	23	16
Turkey	12	8	13	5	7	16	9
Ukraine	3	4	3	–	–	3	2
United States	11,582	10,140	6,180	4,519	3,859	3,591	4,180
Wales	294	106	80	78	46	64	71
West Indies (British)	63	51	37	48	31	27	36
West Indies (not British)	16	4	7	2	8	6	6
Yugoslavia	306	244	251	299	313	446	627
Other European countries	2	–	–	2	2	–	–
Other countries (British)	16	9	5	15	3	6	11
Other countries (not British)	11	9	6	13	6	3	11
Born at sea	2	1	1	1	–	4	3
Totals	**27,530**	**20,591**	**14,382**	**12,476**	**11,277**	**11,643**	**15,101**

Ports of Arrival of Immigrants.—Throughout the greater part of our history, Quebec has been the port at which the greatest number of our immigrants have landed. Of recent years there has been a tendency for a larger percentage of immigrants to arrive at the port of Halifax. This would appear to have been due to increasing immigration in the early spring months before the St. Lawrence is open for traffic. Figures for recent years are given in Table **10.**

10.—Immigrants Arriving in Canada, by Chief Ports of Arrival, calendar years 1931-37.

Port.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Quebec	6,940	3,558	3,063	2,889	2,901	3,478	4,903
Saint John	1,162	46	30	25	20	21	33
Halifax	2,389	1,950	1,446	1,965	1,494	1,654	2,432
North Sydney	300	219	223	260	247	324	480
Sydney	18	3	2	1	7	4	14
Montreal	131	69	58	64	54	55	82
Vancouver	367	294	223	274	187	200	290
Victoria	135	84	56	53	51	44	48
New York	854	632	738	850	943	878	1,170
Boston	2	Nil	9	1	10	5	7
Charlottetown	Nil	“	Nil	1	Nil	Nil	Nil
Other ports	37	27	34	22	72	104	87
From the United States	15,195	13,709	8,500	6,071	5,291	4,876	5,555
Totals	**27,530**	**20,591**	**14,382**	**12,476**	**11,277**	**11,643**	**15,101**

Destinations of Immigrants.—Table **11** shows that in the nine latest calendar years the province of Ontario continued to receive the largest number of immigrants, as has been the case since 1905. In 1929 and 1930 Manitoba was in second place, while in the eight latest years Quebec stood second as the immediate destination of new arrivals. The 1934-35 edition of the Year Book gives similar information, by fiscal years, from 1901 to 1934.

11.—Destinations of Immigrants into Canada, by Provinces, calendar years 1929-38.

Calendar Year.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.	N.W.T.	Not Shown.	Total.
1929	4,961	23,952	61,684	38,340	11,336	15,300	9,417	2	1	164,993
1930	4,060	18,405	37,851	23,837	6,435	7,812	6,395	9	2	104,806
1931	2,547	5,452	12,316	1,056	1,352	2,213	2,583	11	Nil	27,530
1932	1,762	4,134	9,312	757	971	1,692	1,960	3	“	20,591
1933	1,281	2,755	6,210	558	727	1,296	1,552	2	1	14,382
1934	1,027	2,456	5,582	390	519	1,098	1,402	2	Nil	12,476
1935	1,060	2,258	4,786	708	408	735	1,315	7	“	11,277
1936	981	1,995	4,913	938	528	917	1,366	5	“	11,643
1937	1,136	2,611	6,463	1,430	616	1,175	1,667	3	“	15,101
1938	1,270	3,301	7,107	1,673	684	1,648	1,557	4	“	17,244

Occupations of Immigrant Arrivals.—The immigrants most universally acceptable to Canadians are those who settle on the land or those females who enter domestic service. In Table **12** will be found statistics of the occupations and destinations of immigrants arriving in Canada during the calendar year 1937.

12.—Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1937.

NOTE.—Dashes in this table indicate that no immigrants were reported under the corresponding stub item.

Destination.	Total.	Farming Class.				Labouring Class.				Mechanics.			
		18 Yrs. or Over.		Under 18 Yrs.		18 Yrs. or Over.		Under 18 Yrs.		18 Yrs. or Over.		Under 18 Yrs.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Prince Edward Island	56	8	3	2	4	-	-	-	-	1	-	-	-
Via ocean ports	5	-	-	-	-	-	-	-	-	-	-	-	-
From the United States	51	8	3	2	4	-	-	-	-	1	-	-	-
Nova Scotia	775	46	22	15	18	92	2	4	5	15	3	-	2
Via ocean ports	470	14	6	4	5	88	2	4	3	11	2	-	1
From the United States	305	32	16	11	13	4	-	-	2	4	1	-	1
New Brunswick	305	22	6	5	5	12	4	-	1	8	3	-	-
Via ocean ports	72	3	-	1	1	5	1	-	-	4	1	-	-
From the United States	233	19	6	4	4	7	3	-	1	4	2	-	-
Quebec	2,611	169	101	107	84	65	7	12	2	108	40	24	12
Via ocean ports	1,608	132	89	94	75	37	4	9	2	49	14	6	3
From the United States	1,003	37	12	13	9	28	3	3	-	59	26	18	9
Ontario	6,463	302	149	180	117	129	36	36	12	281	103	44	50
Via ocean ports	3,764	216	113	165	107	54	12	25	5	107	48	13	11
From the United States	2,699	86	36	15	10	75	24	11	7	174	55	31	39
Manitoba	1,430	268	211	253	199	6	2	2	-	12	8	2	-
Via ocean ports	1,219	243	197	241	189	4	1	2	-	4	1	1	-
From the United States	211	25	14	12	10	2	1	-	-	8	7	1	-
Saskatchewan	616	100	59	47	56	1	1	3	3	3	2	1	1
Via ocean ports	456	71	46	42	50	1	1	3	3	-	-	-	-
From the United States	160	29	13	5	6	-	-	-	-	3	2	1	1
Alberta	1,175	160	111	103	86	6	2	3	1	16	7	1	1
Via ocean ports	864	104	79	93	71	3	1	3	1	2	2	-	-
From the United States	311	56	32	10	15	3	1	-	-	14	5	1	1
British Columbia	1,649	148	66	52	28	37	20	7	8	39	25	10	6
Via ocean ports	1,075	103	44	48	21	21	10	6	3	19	13	2	3
From the United States	574	45	22	4	7	16	10	1	5	20	12	8	3
Yukon	18	-	-	-	-	1	-	-	-	-	-	-	-
Via ocean ports	10	-	-	-	-	1	-	-	-	-	-	-	-
From the United States	8	-	-	-	-	-	-	-	-	-	-	-	-
Northwest Territories	3	-	-	-	-	-	-	-	-	-	-	-	-
Via ocean ports	3	-	-	-	-	-	-	-	-	-	-	-	-
From the United States	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	**15,101**	**1,223**	**728**	**764**	**597**	**349**	**74**	**67**	**32**	**483**	**191**	**82**	**72**
Via Ocean Ports	**9,546**	**886**	**574**	**688**	**519**	**214**	**32**	**52**	**17**	**196**	**81**	**22**	**18**
From the United States	**5,555**	**337**	**154**	**76**	**78**	**135**	**42**	**15**	**15**	**287**	**110**	**60**	**54**

12.—Immigrants Arriving in Canada, Classified by Occupation and Sex, According to Destination, calendar year 1937.—concluded.

Destination.	Trading and Clerical Classes.				Mining Class.				Female Domestics.		Other Classes.			
	18 Yrs. or Over.		Under 18 Yrs.		18 Yrs. or Over.		Under 18 Yrs.		18 Years or Over.	Under 18 Years.	18 Yrs. or Over.		Under 18 Yrs.	
	M.	F.	M.	F.	M.	F.	M.	F.	F.	F.	M.	F.	M.	F.
Prince Edward Island	1	1	-	-	-	-	-	-	1	-	7	22	2	4
Via ocean ports	-	-	-	-	-	-	-	-	1	-	2	2	-	-
From the United States	1	1	-	-	-	-	-	-	-	-	5	20	2	4
Nova Scotia	23	9	3	2	2	-	-	-	152	37	51	133	69	70
Via ocean ports	11	3	-	1	2	-	-	-	146	37	23	54	25	28
From the United States	12	6	3	1	-	-	-	-	6	-	28	79	44	42
New Brunswick	9	3	-	-	-	-	-	-	8	-	22	95	55	47
Via ocean ports	4	1	-	-	-	-	-	-	5	-	7	17	12	10
From the United States	5	2	-	-	-	-	-	-	3	-	15	78	43	37
Quebec	161	69	14	12	7	1	-	-	127	25	167	713	301	283
Via ocean ports	81	31	8	8	2	-	-	-	119	25	75	392	181	172
From the United States	80	38	6	4	5	1	-	-	8	-	92	321	120	111
Ontario	372	211	46	42	28	7	2	2	249	33	329	1,931	874	898
Via ocean ports	91	60	9	9	14	2	1	2	202	33	110	1,153	596	606
From the United States	281	151	37	33	14	5	1	-	47	-	219	778	278	292
Manitoba	16	14	4	7	1	-	-	-	27	14	49	182	67	86
Via ocean ports	1	-	-	-	-	-	-	-	27	14	30	134	60	70
From the United States	15	14	4	7	1	-	-	-	-	-	19	48	7	16
Saskatchewan	6	2	1	-	-	-	-	-	22	5	30	154	58	61
Via ocean ports	3	1	1	-	-	-	-	-	18	5	15	112	45	39
From the United States	3	1	-	-	-	-	-	-	4	-	15	42	13	22
Alberta	10	7	2	3	3	2	-	-	15	12	38	317	126	143
Via ocean ports	3	4	1	3	1	1	-	-	14	12	15	238	101	112
From the United States	7	3	1	-	2	1	-	-	1	-	23	79	25	31
British Columbia	64	49	11	6	11	7	1	6	46	11	107	546	175	163
Via ocean ports	26	23	2	3	3	2	1	-	42	11	53	365	126	125
From the United States	38	26	9	3	8	5	-	6	4	-	54	181	49	38
Yukon	-	1	-	-	1	-	-	-	1	-	-	9	3	2
Via ocean ports	-	-	-	-	-	-	-	-	-	-	-	4	3	2
From the United States	-	1	-	-	1	-	-	-	1	-	-	5	-	-
Northwest Territories	-	-	-	-	-	-	-	-	-	-	3	-	-	-
Via ocean ports	-	-	-	-	-	-	-	-	-	-	3	-	-	-
From the United States	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	**662**	**366**	**81**	**72**	**53**	**17**	**3**	**8**	**648**	**137**	**803**	**4,102**	**1,730**	**1,757**
Via Ocean Ports	**220**	**123**	**21**	**24**	**22**	**5**	**2**	**2**	**574**	**137**	**333**	**2,471**	**1,149**	**1,164**
From the United States	**442**	**243**	**60**	**48**	**31**	**12**	**1**	**6**	**74**	-	**470**	**1,631**	581	**593**

Prohibited Immigrants.—The following is quoted from Section 3 of the Immigration Act.

PROHIBITED CLASSES.

"No immigrant, passenger or other person, unless he is a Canadian citizen, or has Canadian domicile, shall be permitted to enter or land in Canada, or in case of having landed in or entered Canada shall be permitted to remain therein, who belongs to any of the following classes, hereinafter called 'prohibited classes':—

(a) Idiots, imbeciles, feeble-minded persons, epileptics, insane persons, and persons who have been insane at any time previously;

(b) Persons afflicted with tuberculosis in any form, or with any loathsome disease, or with a disease which is contagious or infectious, or which may become dangerous to the public health, whether such persons intend to settle in Canada or only to pass through Canada in transit to some other country: Provided that if such disease is one which is curable within a reasonably short time, such persons may, subject to the regulations in that behalf, if any, be permitted to remain on board ship if hospital facilities do not exist on shore, or to leave ship for medical treatment;

(c) Immigrants who are dumb, blind, or otherwise physically defective, unless, in the opinion of a Board of Inquiry or officer acting as such, they have sufficient money, or have such profession, occupation, trade, employment or other legitimate mode of earning a living that they are not liable to become a public charge or unless they belong to a family accompanying them or already in Canada and which gives security satisfactory to the Minister against such immigrants becoming a public charge;

(d) Persons who have been convicted of, or admit having committed, any crime involving moral turpitude;

(e) Prostitutes and women and girls coming to Canada for any immoral purpose and pimps or persons living on the avails of prostitution;

(f) Persons who procure or attempt to bring into Canada prostitutes or women or girls for the purpose of prostitution or other immoral purpose;

(g) Professional beggars or vagrants;

(h) Immigrants to whom money has been given or loaned by any charitable organization for the purpose of enabling them to qualify for landing in Canada under this Act, or whose passage to Canada has been paid wholly or in part by any charitable organization, or out of public moneys, unless it is shown that the authority in writing of the Deputy Minister, or in case of persons coming from Europe, the authority in writing of the Assistant Superintendent of Immigration for Canada, in London, has been obtained for the landing in Canada of such persons, and that such authority has been acted upon within a period of sixty days thereafter;

(i) Persons who do not fulfil, meet or comply with the conditions and requirements of any regulations which for the time being are in force and applicable to such persons under this Act;

(j) Persons who in the opinion of the Board of Inquiry or the officer in charge at any port of entry are likely to become a public charge;

(k) Persons of constitutional psychopathic inferiority;

(l) Persons with chronic alcoholism;

(m) Persons not included within any of the foregoing prohibited classes, who upon examination by a medical officer are certified as being mentally or physically defective to such a degree as to affect their ability to earn a living;

(n) Persons who believe in or advocate the overthrow by force or violence of the Government of Canada or of constituted law and authority, or who disbelieve in or are opposed to organized government, or who advocate the assassination of public officials, or who advocate or teach the unlawful destruction of property;

(o) Persons who are members of or affiliated with any organization entertaining or teaching disbelief in or opposition to organized government, or advocating or teaching the duty, necessity, or propriety of the unlawful assaulting or killing of any officer or officers, either of specific individuals or of officers generally of the Government of Canada or of any other organized government, because of his or their official character, or advocating or teaching the unlawful destruction of property;

(q) Persons guilty of espionage with respect to His Majesty or any of His Majesty's allies;

(r) Persons who have been found guilty of high treason or treason or of conspiring against His Majesty, or of assisting His Majesty's enemies in time of war, or of any similar offence against any of His Majesty's allies;

(s) Persons who at any time within a period of ten years from the first day of August, one thousand nine hundred and fourteen, were deported from any part of His Majesty's dominions or from any allied country on account of treason or of conspiring against His Majesty, or of any similar offence in connection with the war against any of the allies of His Majesty;

(t) On and after the first day of July, one thousand nine hundred and nineteen, in addition to the foregoing 'prohibited classes', the following persons shall also be prohibited from entering or landing in Canada: Persons over fifteen years of age, physically capable of reading, who cannot read the English or French language or some other language or dialect: Provided that any admissible person or any person heretofore or hereafter legally admitted, or any citizen of Canada, may bring in or send for his father or grandfather, over fifty-five years of age, his wife, his mother, his grandmother or his unmarried or widowed daughter, if otherwise admissible, whether such relative can read or not, and such relative shall be permitted to enter; for the purpose of ascertaining whether aliens can read, the immigration officer shall use slips of uniform size prepared by direction of the Minister, each containing not less than thirty and not more than forty words in ordinary use printed in plainly legible type in the language or dialect the person may designate as the one in which he desires the examination to be made, and he shall be required to read the words printed on the slip in such language or dialect; but the provisions of this subsection shall not apply to Canadian citizens and persons who have Canadian domicile, to persons in transit through Canada, or to such persons or classes of persons as may from time to time be approved by the Minister;

(u) Members of a family (including children over as well as under 18 years of age) accompanying a person who has been rejected, unless in the opinion of the Board of Inquiry no hardship would be involved by separation of the family."

The Immigration Act provides for the rejection and deportation of immigrants belonging to the prohibited classes, and also for the deportation of those who become undesirables within five years after legal entry.

Table **13** shows the number of immigrants rejected upon their arrival at Canadian ports, by causes and nationalities, for the calendar years 1931-37. Figures covering the period 1903-34 on a fiscal year basis and comparable with those of Table **14** will be found at p. 222 of the 1934-35 Year Book. Table **14** shows the number of deportations after admission, for the fiscal years 1903-26 and by single years for the fiscal years 1927-38, also by causes and nationalities. The Immigration Branch of the Department of Mines and Resources does not compile these figures on a calendar year basis.

13.—Rejections of Prospective Immigrants upon Arrival at Ocean Ports, by Principal Causes and by Nationalities, calendar years 1931-37.

Item.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	Total, 1931-37.
By Causes—								
Medical causes	23	17	14	13	13	10	9	99
Civil causes	286	244	160	224	192	213	217	1,536
Totals	**309**	**261**	**174**	**237**	**205**	**223**	**226**	**1,635**
By Nationalties—								
British	171	144	101	167	133	128	94	938
United States	5	13	9	14	6	9	4	60
Other	133	104	64	56	66	86	128	637

14.—Deportations of Immigrants, Including Accompanying Persons, after Admission, by Principal Causes and by Nationalities, fiscal years ended 1927-38, with Totals 1903-26 and 1903-38.

Item.	Total, 1903-26.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	Total, 1903-38.
By Causes—														
Medical causes	5,988	470	519	650	600	789	697	476	301	144	81	47	42	10,804
Public charges	9,194	354	430	444	2,106	2,245	4,507	4,916	2,991	464	125	110	46	27,932
Criminality	6,556	447	426	441	591	868	1,006	836	493	267	207	117	101	12,356
Other civil causes	1,663	149	257	194	107	200	270	277	250	172	163	240	203	4,145
Accompanying deported persons	788	165	254	235	559	274	545	626	439	81	34	57	21	4,078
Totals	**24,189**	**1,585**	**1,886**	**1,964**	**3,963**	**4,376**	**7,025**	**7,131**	**4,474**	**1,128**	**610**	**571**	**413**	**59,315**
By Nationalities—														
British	12,845	808	1,047	1,083	2,983	3,099	4,248	4,251	2,718	385	157	202	134	33,960
United States	6,700	351	297	294	228	279	260	331	319	199	146	167	138	9,709
Polish	[1]	19	50	74	120	160	500	544	247	91	46	41	19	1,911
Finnish	[1]	33	47	54	72	95	256	334	210	39	13	10	4	1,167
Other	4,644	374	445	459	560	743	1,761	1,671	980	414	248	151	118	12,568

[1] Included with "other" for these years.

Juvenile Immigrants.—Among the most generally acceptable immigrants of recent years were the juveniles of both sexes, many of whom had been trained by highly accredited British organizations for Canadian life before coming to Canada, the boys being taught the lighter branches of farm work, and the girls instructed in domestic occupations. On arrival in Canada the boys were placed on farms, while the girls were placed either in town or country, but the organizations remained the guardians of the children until they had reached maturity, and, in addition the children were subject to efficient and recurrent government inspection until each reached the age of nineteen. This inspection was under the control of the Supervisor of Juvenile Immigration.

Under the British Empire Settlement Agreement the term "children" was applied to boys from 14 to 19 years of age and girls from 14 to 17 migrating to Canada under provincial or approved-society auspices. These organizations were assisted by the Oversea Settlement Agreement, which provided free transportation for the boys and girls from the British Isles migrating to Canada under their auspices. On Sept. 23, 1931, the societies concerned were notified that the Dominion Government had decided to discontinue any further assistance of that nature.

The number of such juvenile immigrants to Canada in each year since 1901 is given in Table **15**.

15.—British Juvenile Immigrants, fiscal years ended 1901-38.

Note.—Juvenile immigrants are, of course, included in the total number of immigrants recorded elsewhere.

Fiscal Year.	Juvenile Immigrants.	Fiscal Year.	Juvenile Immigrants.	Fiscal Year.	Juvenile Immigrants.
1901	977	1914	2,318	1927	1,741
1902	1,540	1915	1,899	1928	2,070
1903	1,979	1916	821	1929	3,036
1904	2,212	1917	251	1930	4,281
1905	2,814	1918	Nil	1931	2,190
1906	3,258	1919	"	1932	478
1907 (9 months)	1,455	1920	155	1933	172
1908	2,375	1921	1,426	1934	6
1909	2,424	1922	1,211	1935	6
1910	2,422	1923	1,184	1936	4
1911	2,524	1924	2,080	1937	10
1912	2,689	1925	2,000	1938	44
1913	2,642	1926	1,862		

Oriental Immigration.—The immigration to Canada of Orientals is fundamentally an economic rather than a racial problem, affecting most of all those parts of the country which are nearest to the Orient and the classes which feel their economic position threatened. A record of Oriental immigration since the commencement of the century is given in Table **16**, while Table **16A** gives the same information for the calendar years for which it has been possible to compile the figures, *viz.*, 1929 to 1937.

16.—Record of Oriental Immigrants, fiscal years ended 1931-38, and by decades, 1901-30.

NOTE.—Statistics for individual fiscal years 1901-30 will be found at p. 206 of the 1938 Year Book.

Fiscal Year.	Chinese.	Japanese.	East Indians.	Total.	Fiscal Year.	Chinese.	Japanese.	East Indians.	Total.
1901-10	23,485	12,691	5,195	41,371	1934	2	105	33	140
1911-20	32,244	7,195	102	39,541	1935	Nil	93	33	126
					1936	"	83	21	104
1921-30	5,570	4,334	418	10,322	1937	1	103	13	117
1931	Nil	205	80	285	1938	Nil	139	14	153
1932	"	195	47	242					
1933	1	115	63	179	**Totals**	**61,303**	**25,258**	**6,019**	**92,580**

16A.—Record of Oriental Immigrants, calendar years, 1929-37.

Calendar Year.	Chinese.	Japanese.	East Indians.	Total.
1929	1	180	49	230
1930	Nil	218	80	298
1931	"	174	52	226
1932	1	119	61	181
1933	1	106	36	143
1934	1	126	33	160
1935	Nil	70	26	96
1936	"	103	13	116
1937	1	146	11	158

Chinese Immigrants.—Oriental immigration to the Pacific Coast of North America appears to have commenced with the coming of Chinese immigrants about the time of the discovery of gold in California in 1849, and British Columbia is thought to have received its first Chinese immigrants some time before 1870. The original occupations of these immigrants were laundry workers and domestic servants. As early as 1872 Chinese were employed in the coal mines of the province and the Legislature was already considering the imposition of a poll tax on Chinese, the same proposition coming up later in the Dominion Parliament with the design of preventing the employment of Chinese labour in railway construction. A Royal Commission was appointed by the Dominion Government in 1884 to investigate Chinese immigration and this Commission recommended the imposition of a head tax of $10 upon Chinese entering Canada, together with registration and special legislation regulating the entry of Chinese domestic servants. This led to the passage of legislation in 1885 (48-49 Vict., c. 71) providing that thereafter Chinese of the labouring class should be required, as a condition of entering Canada, to pay a head tax of $50 each. On Jan. 1, 1901 (63-64 Vict., c. 32), this tax was increased to $100, and on Jan. 1, 1904 (3 Edw. VII, c. 8), after another Royal Commission had reported on this matter, the head tax was further increased to $500. This tax was paid by all Chinese immigrants except consular officers, merchants, and clergymen and their families, tourists, men of science, students, and teachers. In spite of this restrictive legislation, the number of Chinese enumerated at the decennial censuses rose from 4,383 in 1881 to 17,312 in 1901, to 27,774 in 1911, to 39,587 in 1921, and 46,519 in 1931. Of this latter number, 43,051 were males and only 3,468 females. Over 58 p.c. of all the Chinese in Canada, *viz.*, 27,139, were residents of British Columbia.

17.—Record of Revenue Receipts and Registrations for Leave of Chinese Immigrants, fiscal years ended Mar. 31, 1931-38, with Totals 1886-1900, and by decades, 1901-30.

Fiscal Year.	Paying Tax.	Exempt from Tax.	Percentage of Total Arrivals Admitted, Exempt from Tax.	Registrations for Leave.	Total Revenue.
	No.	No.	p.c.	No.	$
Totals (1886 to 1900, inclusive)	**28,637**	**394**	**1·36**	**15,853**	**1,454,239**
Totals (1901 to 1910, inclusive)	**20,645**	**2,850**	**12·13**	**25,453**	**3,885,204**
Totals (1911 to 1920, inclusive)	**29,476**	**2,768**	**8·58**	**38,899**	**15,198,518**
Totals (1921 to 1930, inclusive)	**3,623**	**1,949**	**33·00**	**58,857**	**2,422,705**
1931	Nil	Nil	–	5,783	28,846
1932	"	"	–	4,387	11,584
1933	"	1	100·00	3,626	9,152
1934	"	2	100·00	2,156	7,237
1935	"	Nil	–	2,103	6,506
1936	"	"	–	2,138	6,501
1937	"	1	100·00	2,059	9,893
1938	"	Nil	–	792	2,359

The Chinese Immigration Act of 1923 (13-14 Geo. V, c. 38)* limits the entry to or landing in Canada of persons of Chinese origin or descent, irrespective of allegiance or citizenship, to the following classes:—

(*a*) Members of the diplomatic corps or other government representatives, their suites and their servants, and consuls and consular agents;

(*b*) Children born in Canada of parents of Chinese origin or descent, who have left Canada for educational or other purposes, on substantiating their identity to the satisfaction of the controller at the port or place where they seek to enter on their return;

(*c*) Merchants as defined by such regulations as the Minister may prescribe; students coming to Canada for the purpose of attending, and while in actual attendance at, any Canadian university or college authorized by statute or charter to confer degrees.

(*d*) Persons in transit through Canada.

Classes (*c*) and (*d*) are to possess passports issued by the Government of China and endorsed by a Canadian immigration officer.

Japanese Immigrants.—Japanese immigration to Canada commenced about 1896, and a total of some 12,000 came in between then and 1900, but at the Census of 1901 the total number enumerated as domiciled in the Dominion was only 4,738; in 1911, 9,021; in 1921, 15,868; in 1931, 23,342—22,205 of these latter being domiciled in British Columbia. The immigration of Japanese was especially active in the fiscal years 1906 to 1908, in which three years a total of 11,565 entered the country. In 1908 an agreement was made with the Japanese Government, under which the latter undertook to limit the number of passports issued to Japanese immigrants to Canada. Japanese immigration has been very restricted since 1929, only 139 Japanese immigrants having entered Canada in the fiscal year 1938.

East Indian Immigrants.—The immigration of East Indians, like Japanese, did not become active until the fiscal years 1906-08, when 5,134 arrived (see Table **15**, p. 206, of the 1938 Year Book). However, as a consequence of the operation of the Immigration Regulations, East Indian immigration has for years been comparatively small. A resolution of the Imperial War Conference of 1918 declared that "it is the inherent function of the Governments of the several communities of the British Commonwealth that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities". However, it was recommended that East Indians, already permanently domiciled in other British countries, should be allowed to bring in their wives and minor children. ' In the ten fiscal years 1929-38 only 415 East Indians, many of them women and children, were admitted to Canada.

---

* R.S.C. 1927, c. 95.

Expenditures on Immigration.—The sums expended by the Dominion Government on immigration in fiscal periods ended 1868 to 1938, inclusive, as stated in the Public Accounts issued annually by the Department of Finance, are shown in Table **18**.

18.—Expenditures on Immigration in the fiscal years ended Mar. 31, 1931-38, with Totals, 1868-70, and by Decades, 1871-1930.

(Compiled from the Public Accounts.)

Fiscal Year.	$	Fiscal Year.	$
Total (1868-1870, inclusive)	**118,968**	1932	1,873,006
Total (1871-1880, inclusive)	**2,149,249**	1933	1,406,031
Total (1881-1890, inclusive)	**2,894,589**	1934	1,155,314
Total (1891-1900, inclusive)	**2,136,489**	1935	1,066,869
Total (1901-1910, inclusive)	**7,768,199**	1936	1,123,991
Total (1911-1920, inclusive)	**13,624,411**	1937	1,119,317
Total (1921-1930, inclusive)	**23,732,290**[1]	1938	1,163,004
1931	2,255,249	**Grand Total**	**63,586,976**

[1] Includes expenditures on British Empire Exhibition: 1924, $649,882; 1925, $599,797; 1926, $70,661.

Emigration from Canada.—An important factor tending to offset the immigration activities of the past was a movement from Canada to the United States which attained considerable proportions at certain periods. The quota system of immigration regulation, applied by the United States Government against immigrants generally, but not against the Canadian born, had the effect of limiting immigration to the United States and thereby encouraging Canadians to enter that country. No record of this movement had ever been kept by the Canadian Government, and, while its seriousness was recognized, its magnitude, as indicated by the United States returns, was questioned on the ground that these returns did not make allowance for Canadians returning to Canada after a more or less extended period of residence in the United States. The Canadian Department of Immigration and Colonization was convinced that a very considerable return movement was taking place, but, until 1924, no attempt was made to ascertain the exact magnitude of that movement. In that year immigration officers were instructed to take note of Canadians returning to Canada from the United States after having left Canada to reside in that country. The results are tabulated in Table **19**.

Another circumstance which has, in the past, occasioned a considerable movement from Canada to the United States has, no doubt, been the practice of Europeans to enter Canada and declare themselves *bona fide* immigrants, with the real intention of entering the United States as soon as the quota restrictions would permit them to do so. The tightening-up of the United States regulations *re* persons entering the United States from Canada, and the active co-operation of the Canadian Department of Immigration and Colonization in discouraging this traffic, seem to have effectually met this situation.

Table **19** shows the number of Canadians who had gone to the United States for purposes of permanent residence and who returned to Canada during the period from Apr. 1, 1924, to Dec. 31, 1938.

19.—Canadians Returned from the United States, calendar years 1924-38.

Calendar Year.	Canadian-Born Citizens.	British Born who had Acquired Canadian Domicile.	Naturalized Canadian Citizens.	Total.	Calendar Year.	Canadian-Born Citizens.	British Born who had Acquired Canadian Domicile.	Naturalized Canadian Citizens.	Total.
1924[1]....	31,217	3,736	2,364	37,317	1932....	16,801	809	610	18,220
1925.....	33,774	3,658	2,555	39,987	1933....	9,330	457	422	10,209
1926.....	53,736	5,792	2,765	62,293	1934....	5,926	739	607	7,272
1927.....	36,838	3,560	1,680	42,078	1935....	4,961	632	785	6,378
1928.....	30,436	2,674	1,010	34,120	1936....	4,649	297	222	5,168
1929.....	27,328	2,265	886	30,479	1937....	4,443	377	347	5,167
1930.....	28,230	2,176	1,202	31,608	1938....	4,016	333	310	4,659
1931.....	18,503	1,135	714	20,352					

[1] Nine months.

The movement of population between the two countries now appears to be slightly towards the United States. In the U.S. fiscal year ended June 30, 1938, the total movement from Canada to that country was 19,255, made up as follows: immigrants, 14,070; U.S. citizens returning after residence in Canada, 5,032; and persons deported from Canada, 153. The movement towards Canada totalled 9,960, made up as follows: immigrants, 4,324 (of whom 3,306 were U.S. citizens); persons deported to Canada, 1,941; and persons permitted to depart voluntarily to Canada in lieu of deportation proceedings, 3,695. Canadian immigration figures for the same period show 5,845 immigrants admitted to Canada and 5,097 returning Canadians, a total of 10,942. The discrepancy between the two series is probably due to incomplete emigration statistics.

In the past eight years there has also been considerable emigration from Canada to the British Isles. Table 20, taken from the Statistical Abstract of the United Kingdom, shows the movement of population between the United Kingdom and British North America from 1924 to 1938. Inasmuch as the movement between the British Isles and Newfoundland is negligible, the table may be taken as presenting a fair picture of immigrant and emigrant movement between Canada and the United Kingdom.

20.—Numbers of Passengers of British Nationality Changing Their Permanent Residence between the United Kingdom and British North America, calendar years 1924-38.

(From the *Statistical Abstract of the United Kingdom.*)

Calendar Year.	Leaving U.K. for B.N.A.	Leaving B.N.A. for U.K.	Net Gain (+) or Loss (−) of Population to Canada.	Calendar Year.	Leaving U.K. for B.N.A.	Leaving B.N.A. for U.K.	Net Gain (+) or Loss (−) of Population to Canada.
1924...............	63,016	15,822	+47,194	1932...............	3,104	21,187	−18,083
1925...............	38,662	13,939	+24,723	1933...............	2,243	16,371	−14,128
1926...............	49,632	10,481	+39,151	1934...............	2,167	12,128	− 9,961
1927...............	52,916	12,570	+40,346	1935...............	2,175	9,712	− 7,537
1928...............	54,709	15,804	+38,905	1936...............	2,281	10,107	− 7,826
1929...............	65,558	12,294	+53,264	1937...............	2,850	8.970	− 6,120
1930...............	31,074	15,820	+15,254	1938...............	3,367	7,341	− 3,974
1931...............	7,620	17,864	−10,244				

In connection with the annual estimates of population, a study of the movement of population has been made from available data. The reader will find the results of this summarized at pp. 88-89 of this volume.

In Table 21 will be found the numbers of returning Canadians and other non-immigrant transoceanic passengers entering Canada during the calendar years 1936 and 1937, by class of travel, with totals for the years 1930 to 1935.

21.—Returning Canadians and Other Non-Immigrants Entering Canada via Ocean Ports, by Class of Travel, calendar years 1936 and 1937, with Totals for calendar years 1930-35.

NOTE.—Figures in this table cover transoceanic passengers only. Totals for 1926 to 1934, on a fiscal year basis, will be found at p. 228 of the 1934-35 Year Book.

Calendar Year and Item.	Transoceanic Passengers.			
	Saloon.	Cabin Class.	Third Class.	Total.
Totals, 1930	**6,064**	**14,458**	**30,479**	**51,001**
Totals, 1931	**5,170**	**10,281**	**26,741**	**42,192**
Totals, 1932	**5,333**	**9,314**	**27,285**	**41,932**
Totals, 1933	**4,965**	**8,447**	**23,644**	**37,056**
Totals, 1934	**6,103**	**9,119**	**23,928**	**39,150**
Totals, 1935	**5,780**	**9,981**	**24,618**	**40,379**
1936.				
Canadian born, returning	1,740	4,160	8,509	14,409
British born, returning	321	1,927	13,474	15,722
British naturalized, returning	173	466	1,623	2,262
Alien nationals, returning	32	137	1,337	1,506
Non-immigrant, tourist	714	4,130	4,751	9,595
" professional	Nil	Nil	9	9
" student	61	7	7	75
" theatrical	Nil	Nil	Nil	Nil
" in transit	1,348	1,514	365	3,227
" Diplomatic Corps	2	15	1	18
Totals, 1936	**4,391**	**12,356**	**30,076**	**46,823**
1937.				
Canadian born, returning	1,709	4,618	8,081	14,408
British born, returning	304	2,010	11,792	14,106
British naturalized, returning	181	521	1,691	2,393
Alien nationals, returning	36	138	1,478	1,652
Non-immigrant, tourist	807	5,027	5,802	11,636
" professional	Nil	1	13	14
" student	"	2	4	6
" theatrical	"	Nil	Nil	Nil
" in transit	1,452	1,487	514	3,453
" Diplomatic Corps	Nil	6	Nil	6
Totals, 1937	**4,489**	**13,810**	**29,375**	**47,674**

Section 2.—Colonization Activities.

Recent information on this subject was given at pp. 201-202 of the 1936 edition of the Year Book. To it the interested reader is referred.

CHAPTER VII.—SURVEY OF PRODUCTION.*

Production in 1936 registered a gain of 12·5 p.c. in net value, thereby indicating considerable progress in the advance towards industrial recovery. The net value of commodities produced amounted to $2,666,000,000 against a revised figure of $2,369,000,000 in 1935, indicating that, on the whole, Canadians were more prosperous than in any year since 1931. Since the level of commodity prices advanced from 72·1 to 74·6, an adjusted gain of about 9 p.c. in volume is denoted, roughly confirming the rise of nearly 10 p.c. in the index of industrial production. A dominating influence in the rise was the pronounced increase in the price of farm products, greatly improving the relationship between such prices and those of goods which the farmer must buy. The general nature of the improvement was substantiated by the fact that each of the nine main branches of production participated in the advance with gains ranging from nearly 4 p.c. in trapping to over 22 p.c. in mining.

While changes in general method, beginning with 1935, prevent precise comparability, it is evident that the lowest point of the recent depression was reached in 1933 and that the revival commencing in the latter part of that year was fairly continuous until the end of 1937.

Price and volume indexes indicate that a further gain in net production occurred in 1937. The index of wholesale prices averaged over 13 p.c. higher, while the advance in the index of industrial production was 10·8 p.c. The gain in the index of general employment was 10 p.c.

The most encouraging development of the past decade has been the manner in which the mining, forestry, electric power, and manufacturing industries have taken up the slack caused by a succession of sub-normal crops. The Canadian economy in the degree of its diversification has become stronger and more resistant to the uncertainties of the climate.

The Definition of 'Production'.—The term 'production' is used here in its popular acceptation, *i.e.*, as including such processes as the growing of crops, extraction of minerals, capture of fish, conversion of water power into electric current, manufacturing, etc.—in economic phrase, the creation of 'form utilities'. It does not include various activities which are no less productive in a broad and strictly economic sense, such as (*a*) transportation, refrigeration, merchandising, etc., which add the further utilities of 'place', 'time', and 'possession' to commodities already worked up into form, and (*b*) personal and professional services, such as those of the teacher and the doctor, which are not concerned with commodities at all, but are nevertheless essential to any civilized society—representing, in economic language, the creation of 'service utilities'.

As showing the importance of these latter activities, it may be pointed out, for comparison with the figures in the accompanying tables, that steam railway gross earnings in 1936, the latest year for which complete statistics of production are available, amounted to $334,768,557, street railway gross earnings to $41,391,927, and telephone and telegraph earnings to $70,149,464, all of which, from a broad point of view, may be considered as production. Further, it may be noted that, according to the Census of 1931, out of 3,927,591 persons of ten years of age or over recorded as gainfully occupied, 306,273 were engaged in transportation activities, 387,315 in trade, 92,317 in finance, and 767,705 in service occupations. While 81,610 of the latter were engaged in custom and repair work, the value of which is included in the survey of production, the value of the production of the remaining

---

* Revised by Sydney B. Smith, M.A., Dominion Bureau of Statistics.

1,472,000 gainfully occupied persons in the four occupational groups just mentioned would not appear to be included to any extent in the survey of production.

'Gross' and 'Net' Production.—The values of products are shown under two headings, namely, 'gross' and 'net'. Gross production represents the total value of all the individual commodities produced under a particular heading. Net production represents an attempt to eliminate the value of materials, fuel, purchased electricity, and process supplies consumed in the production process. The net figures, it will be seen, appear chiefly in the case of secondary production or manufactures, though eliminations are also made in certain cases in the primary or extractive industries, as, for example, seed in the case of field crops, and feed in the case of farm animals. On the other hand, such items as fertilizers in the case of field crops, and reforestation in the case of forestry, are disregarded as partaking of the nature of replacement. The cost of fuel and electricity is deducted in accordance with Resolution 23 of the Conference of British Commonwealth Statisticians, 1935, which states: "The term *net output* or *net value of production* should be used to denote the value added in each industry to the cost of the objects used in production, including all materials, whether transformed or not in the industrial processes, and fuel and purchased power consumed, whether used for heating, lighting or other purposes, but excluding any amount paid to other firms for work given out to be done by them".

Difficulties in Differentiating between the Branches of Production.—A survey of production must differentiate between the more important branches and at the same time give a purview of the whole which will be free from overlapping. This is somewhat difficult to present with clearness, in view of the varying definitions that attach to industrial groups from different points of view. For example, brick, tile, and cement are frequently included under "mineral production" as being the first finished products of commercial value resulting from the productive process; frequently, however, they are classified under "manufactures" in view of the nature of the productive process—either allocation being correct according to the point of view. In the summing up, production in such industries is regarded as primary production and also as secondary production, but the duplication is eliminated in the grand totals.

Basis of Computation for Each Branch of Production.—The primary industries of agriculture, fishing, forestry, mining, etc., are separated in this statement from the secondary or manufacturing processes. The close association between the two and the overlappings that are apt to occur have already been pointed out. As further explaining the procedure that has been followed in drawing up the tables, the following notes are appended:—

Agriculture.—Dairy factories are included under this heading; farm dairy products (gross) include the milk consumed whole and sold to dairy factories, and the butter, etc., made on the farm. The duplication is eliminated when obtaining the grand total values of gross and net production. The cost of seed and feed is deducted from the gross value of agricultural production to obtain the net value.

Fisheries.—Gross value is the sum of fish caught and landed, factory output, and value added domestically. Net is the value of fish marketed, less fuel, electricity, supplies, salt, containers, etc.

Forestry.—Forestry production is understood to consist of the operations in the woods as well as those of sawmills and pulp-mills, the latter being limited to the making of products such as pulp and paper, lumber, lath, shingles, and sawn railway ties. The cost of raw materials, fuel, and electricity is deducted to obtain the net value. Credit is given for materials used as fuel.

Fur Production.—The item of fur production is limited to wild-life production. To obtain a total of the pelts produced in Canada, it would be necessary to add to the wild-life output the production of pelts on fur farms, which is included in the total for agriculture.

Mineral Production.—Under mineral production many items are included that are also allocated to manufactures. Considerable overlapping exists as between mineral production on the one hand and manufactures on the other. The Bureau presents the detailed statistics of these groups (the chief of which are smelters, brick, cement, lime, etc.) in its reports on mineral production, since their product is the first to which a commercial value is ordinarily assigned. The figure for net production is the industrial total, *i.e.*, the net value of sales. The value of ores used by smelters, cost of fuel, purchased electricity, and process supplies, etc., are added to make up the gross value.

Electric Power.—Total revenue, interprovincial sales excluded, is regarded as the gross, and the cost of fuel is deducted to give the net value.

Construction.—The total value of work performed is regarded as the gross, and the cost of materials is deducted to obtain the net value.

Custom and Repair.—A special tabulation is made, based upon the Census of Merchandising and Service Establishments, 1930. The net value is obtained by deducting the cost of materials and supplies from gross receipts.

Total Manufactures.—The figure given for this heading is a comprehensive one including the several items listed with the extractive industries above, though also frequently regarded as manufactures, *viz.*, dairy factories, fish canning and curing, sawmills, pulp and paper mills, and certain mineral industries. This duplication is eliminated from the grand totals as shown in the tables. It should be noted that "central electric stations" and "dyeing, cleaning, and laundry work" have been dropped from the official Census of Manufactures for 1936 and the figures for the preceding year have been revised accordingly. The figures given for total manufactures are inclusive of the value of the products of all manufacturing processes closely associated with the extractive industries that are frequently included under this heading; hence it is obvious that the grand total is equivalent to an amount obtained by adding the values for total manufactures and for the other eight divisions, and deducting the amount of duplication between manufactures and the primary industries.

Section 1.—The Leading Branches of Production in 1936.

The net value of a nation's commodity production is usually an excellent criterion of the purchasing power of the people. Net production signifies the value left in the producers' hands after the elimination of the value of the commodities consumed in production, including all materials, process supplies, fuel, and purchased electricity. Confining subsequent analysis to the net value of commodities produced, it is observed that each of the main divisions of industry showed appreciable advances in 1936 over the preceding year. The mining industry registered the greatest percentage gain, reflecting enhanced prices for base metals and expansion in the gold-mining industry. All metals, with the exception of silver, were moved in much greater volume. The gain in the mining industrial total after the usual deductions, was no less that $53,400,000, an appreciation of 22·4 p.c.

As a result of the improved trend in agricultural prices, the decline in the volume of field-crop production was more than counterbalanced, the net value of agriculture rising to $690,400,000, a gain of nearly 12 p.c., over the $617,900,000 obtained in 1935. The percentage gain of 12·1 in manufacturing production was slightly greater than in agriculture, the net value in 1936 being $1,289,600,000 against $1,150,900,000 in the preceding year. Forestry production, including woods operations, sawmilling, and pulp and paper, recorded a gain of no less than 16·8 p.c., export marketing being particularly active. Newsprint production reached a new high level. Fisheries showed an encouraging advance of 13 p.c. in value, the near record catch in British Columbia and improved export and price factors indicating considerable betterment. Electric power continued its steady upward trend gaining 6·7 p.c. in net value over 1935.

The construction industry showed further revival in 1936, private operations more than counterbalancing the decline in governmental contracts. A net increase in value of $15,000,000 or 12·4 p.c. was registered.

A detailed study of some 15 groups under the heading of custom and repair established this industry on a somewhat higher basis than formerly. The net value of custom and repair work in 1936 was placed at $97,300,000, a gain of 6·1 p.c. over the preceding year.

Comparing the growth of primary and secondary industries, it is observed that the primary group registered a net advance of 14·1 p.c. in 1936 over 1935, compared with a net increase of 11·7 p.c. for secondary production in the same comparison. This divergence was due to the greater rise in the prices of primary materials. The official price index of producers' goods reached 72·4 in 1936, compared with 69·6 in 1935, whereas the index of consumers' goods advanced to only 74·7 from 73·6, indicating a close approach to a price parity between the two great branches of the national economy.

1.—Gross and Net Values of Production in Canada, by Industries, 1935 and 1936.

Division of Industry.	1935.[1]		1936.		Percentage Increase in Net Value, 1936 from 1935.	Percentage of Net Value by Industry to Total Net Production 1936.
	Gross.	Net.	Gross.	Net.		
	$	$	$	$	p.c.	p.c.
Agriculture	952,431,000	617,867,000	1,079,571,000	690,379,000	11·7	25·90
Forestry	341,432,372	198,545,244	400,292,122	231,937,561	16·8	8·70
Fisheries	45,386,749	30,269,056	51,081,135	34,234,063	13·1	1·28
Trapping	8,877,331	8,877,331	9,214,325	9,214,325	3·8	0·35
Mining[2]	411,094,583	238,581,268	497,332,721	291,972,359	22·4	10·95
Electric power	127,177,954	125,123,078	135,865,173	133,561,387	6·7	5·01
Totals, Primary Production	1,886,399,989	1,219,262,977	2,173,356,476	1,391,298,695	14·1	52·19
Construction	215,548,873	120,815,289	258,040,400	135,851,162	12·4	5·10
Custom and repair	149,948,104	91,711,442	158,202,576	97,333,712	6·1	3·65
Manufactures[3]	2,651,325,388	1,150,899,283	3,002,403,814	1,289,592,672	12·1	48·37[4]
Totals, Secondary Production[4]	3,016,822,365	1,363,426,014	3,418,646,790	1,522,777,546	11·7	57·12[4]
Grand Totals	**4,346,117,217**	**2,369,064,383**	**4,933,384,625**	**2,665,861,689**	**12·5**	**100·00**

[1] Revised since the publication of the 1938 Year Book. In conformance with Resolution 23 adopted by the Conference of British Commonwealth Statisticians of 1935, the cost of fuel and purchased electricity was deducted from the gross value of all industries for 1935 and 1936. This is in addition to the deduction for cost of materials and process supplies. [2] Gross values comprise the mineral production, as shown in Chapter XII, Table 1, plus the value of ores and other raw materials of the smelting industry. [3] The item "Manufactures" includes dairy factories, sawmills, pulp and paper mills, fish canning and curing and certain mineral industries, which are also included in other headings above. This duplication amounting in 1935 to a gross of $557,105,137 and a net of $213,624,608 and in 1936 to a gross of $658,618,441 and a net of $248,214,552 is eliminated from the grand total. [4] Secondary production includes the above-mentioned duplication. The percentage of the net manufactures, *n.e.s.*, to the total net production in 1936 was 39·06.

2.—Itemized Statement of the Net Values of Production in Canada during 1935 and 1936, Indicating the Method of Computation by Giving Separately the Duplicated Items.

Classification.	1935.	1936.
	$	$
PRIMARY PRODUCTION.		
Agricultural Production	617,867,000	690,379,000
Forestry—		
Logs and bolts	34,077,938	44,827,957
Pulpwood	41,195,871	48,680,200
Hewn railway ties	3,188,651	3,190,052
Fuel	31,864,500	32,167,410
All other forest products	5,134,819	5,938,609
Less supplies	−25,629,366	−26,000,000
Totals, Operations in the Woods	89,832,413	108,804,228
Sawmill products	29,513,090	35,982,667
Pulp and paper mill products	79,199,741	87,150,666
Totals, Milling Operations	108,712,831	123,133,333
Totals, Forestry Production	198,545,244	231,937,561
Fisheries—		
Fish prepared domestically or sold fresh by fishermen	9,796,892	10,167,470
Sales to canning and curing establishments	10,958,895	11,916,080
Values added domestically	1,172,606	2,312,784
Fish-canning and -curing establishments (values added)	12,499,461	14,768,721
Less fuel, electricity, and supplies	−4,158,798	−4,930,992
Totals, Fisheries Production	30,269,056	34,234,063
Trapping—		
Fur production (wild life)	8,877,331	9,214,325
Mineral Production	238,581,268	291,972,359
Electric Light and Power	125,123,078	133,561,387
TOTALS, PRIMARY PRODUCTION	1,219,262,977	1,391,298,695
SECONDARY PRODUCTION.		
Construction	120,815,289	135,851,162
Custom and Repair	91,711,442	97,333,712
Manufactures—		
Vegetable products	226,844,633	254,135,013
Animal products	99,633,595	109,823,848
Textiles	152,594,573	162,677,272
Wood and paper	235,877,251	261,020,034
Iron and steel	179,151,863	211,572,641
Non-ferrous metals	107,898,470	132,423,707
Non-metallic minerals	66,053,236	68,707,776
Chemicals	66,001,290	69,854,217
Miscellaneous	16,844,372	19,378,164
Totals, Manufactures[1]	1,150,899,283	1,289,592,672
TOTALS, SECONDARY PRODUCTION	1,363,426,014	1,522,777,546
Grand Totals[1]	**2,369,064,383**	**2,665,861,689**

[1] The item "Totals, Manufactures" includes the following industries, which are also shown elsewhere, the amount of the duplication being deducted from the grand total:—

	1935.	1936.
	$	$
Dairy factories	30,832,166	32,466,613
Sawmills and pulp and paper mills	108,712,831	123,133,333
Fish canning- and curing-establishments	8,340,663	9,837,729
Mineral industries	65,738,948	82,776,877
Totals	213,624,608	248,214,552
Manufactures, *n.e.s.*	937,274,675	1,041,378,120

Relative Importance of the Several Branches of Production.—Mainly because of the adverse weather conditions and low prices experienced by agriculture in recent years, the relative importance of manufacturing has been accentuated. Agricultural production in 1936 represented about 26 p.c. of the net output of all industries, while the total value added by the manufacturing process was over 48 p.c. of the total net production. Eliminating the duplicated items which are also included in the several extractive industries with which they are associated, we find that the output of manufacturing industries, not elsewhere stated, was 39·1 p.c. of the net total. Mining held third place in 1936, contributing nearly 11 p.c. of the Dominion aggregate. Forestry was responsible for 8·7 p.c. of the net, while construction and electric power contributed 5·1 and 5·0 p.c., respectively. Custom and repair, fisheries, and trapping followed in importance.

Section 2.—The Provincial Distribution of Production.

All provinces showed gains in net production in 1936 over the preceding year. Considerable betterment was enjoyed in the Maritimes, the net total for the region being up 8·7 p.c., with advances of 13·3 p.c., 8·8 p.c., and 7·8 p.c. for Prince Edward Island, Nova Scotia, and New Brunswick, respectively. Extending the gain of the preceding year, the net production of Quebec showed an increase of 9·4 p.c. to $657,000,000 in 1936. The increase in Ontario due to mining was somewhat more substantial at 12·9 p.c. The trend was unevenly upward in the Prairie Provinces. Manitoba registered an advance of 21·3 p.c., the greatest of any province, while Saskatchewan and Alberta gained 16·0 p.c. and 7·3 p.c., respectively. The net total for the area of $442,700,000 was 13·9 p.c. greater than in 1935. Recovery continued apace in British Columbia, an advance of nearly 21 p.c. having been shown over the preceding year.

Relative Production, by Provinces, 1936.—Among the nine provinces, Ontario maintained her pre-eminence by a wide margin in the output of commodities, producing 44·4 p.c. of the Dominion total compared with 44·2 p.c. in 1935. Quebec followed with an output of 24·6 p.c. against 25·4 p.c. in the preceding year. British Columbia and Alberta were again in third and fourth positions, contributing 8·1 p.c. and 6·2 p.c. of the grand total. Saskatchewan, Manitoba, Nova Scotia, New Brunswick, and Prince Edward Island followed in the order named.

3.—Summary Analysis of the Value of Production in Canada, by Provinces, 1935 and 1936.

Province.	1935.				1936.			
	Gross Value.	Net Value.[1]			Gross Value.	Net Value.[1]		
		Amount.	Per centage.	Per Capita.[2]		Amount.	Per centage.	Per Capita.[2]
	$	$	$	$	$	$	$	$
P.E.I.	19,269,535	11,031,987	0·46	123·95	21,685,424	12,495,760	0·47	135·82
N.S.	145,284,538	82,577,156	3·49	156·70	156,653,932	89,823,005	3·37	167·27
N.B.	107,542,475	58,946,355	2·49	137·40	118,176,103	63,573,236	2·38	146·15
Que.	1,126,333,296	600,775,158	25·36	196·20	1,263,428,385	656,952,315	24·64	212·20
Ont.	1,962,942,914	1,048,129,100	44·24	285·36	2,234,703,431	1,183,844,782	44·41	320·83
Man.	201,426,835	101,253,414	4·27	142·41	234,807,096	122,874,879	4·61	172·82
Sask.	218,126,039	134,000,749	5·66	143·93	256,461,584	155,439,051	5·83	166·96
Alta.	246,617,139	153,271,341	6·47	200·62	263,239,084	164,409,521	6·17	212·97
B.C. and Yukon	318,574,446[3]	179,079,123[3]	7·56	239·10	384,229,586[3]	216,449,140[3]	8·12	283·31
Totals	**4,346,117,217**	**2,369,064,383**	**100·00**	**216·65**	**4,933,384,625**	**2,665,861,689**	**100·00**	**241·75**

[1] In conformance with Resolution 23 adopted by the Conference of British Commonwealth Statisticians of 1935, the cost of fuel and purchased electricity was deducted from the gross value of all industries for 1935 and 1936. This is in addition to the deduction for cost of materials and process supplies.

[2] Estimates of population on which these figures are based will be found on p. 113.

[3] The value of production in Yukon, mainly in mining and trapping (including similar industries of the N.W.T.), was $3,375,554 gross and $3,110,950 net in 1935 and $4,038,105 gross and $3,401,279 net in 1936.

Per Capita Production by Provinces.—In the foregoing table the net commodity production is appraised on a per capita basis by provinces. This represents the net value of new wealth put into the national economy by the people and, as such, measures the annual dollar return on the natural resources, the plant, and equipment of the nation. As already stated, it is distinct from, and must not be confused with, the national income, which includes, in addition to the net commodity production, the value of services, the utilities of time, place, and possession, which, although somewhat intangible, are in their turn equally as valuable in the economic sense as the actual commodities produced.

All provinces recorded appreciable per capita betterment in 1936 over 1935. Owing to its pre-eminent industrial position, Ontario had a net commodity output of nearly $321 per capita in 1936, an improvement of $35 per capita over 1935, due to considerable gains in manufacturing, mining, and agriculture. British Columbia ranked second with a per capita production of $283, registering an increase of $44 per capita over 1935. Alberta and Quebec figures were quite similar at $213 and $212, respectively, both recording gains from the preceding year.

The Dominion figure of net commodity production, at nearly $242 per capita, was 11·6 p.c. or $25 in advance of the figure for 1935, with provincial totals ranging from $136 for Prince Edward Island to $321 for Ontario. The estimated increase in population in 1936 over 1935 was nearly 1 p.c., the estimate being 11,028,000 as at June 1st.

Section 3.—Leading Branches of Production in each Province, 1936 compared with 1935.

Maritime Provinces.—The net value of production in the Maritimes during 1936 rose nearly 9 p.c. or $13,336,000 over the preceding year. Agriculture contributed about one-quarter of the net, while manufacturing, eliminating duplication, accounted for 21 p.c. Construction was more active than in 1935. Mining continued to increase in importance with 13 p.c. of the total for the Maritimes attributable to this industry. Fisheries showed a gain of 12 p.c., the total reaching $12,622,000.

Quebec.—Manufacturing continued to be by far the leading industry in Quebec, contributing, without duplication, 46·6 p.c. of the net value produced in the province during 1936. This percentage compares with agriculture at only 17 p.c., and forestry on a revised basis at 13 p.c. of the total net. Mining registered a gain in relative importance from 5·6 to 6·8 p.c., while electric power showed a percentage decline in importance.

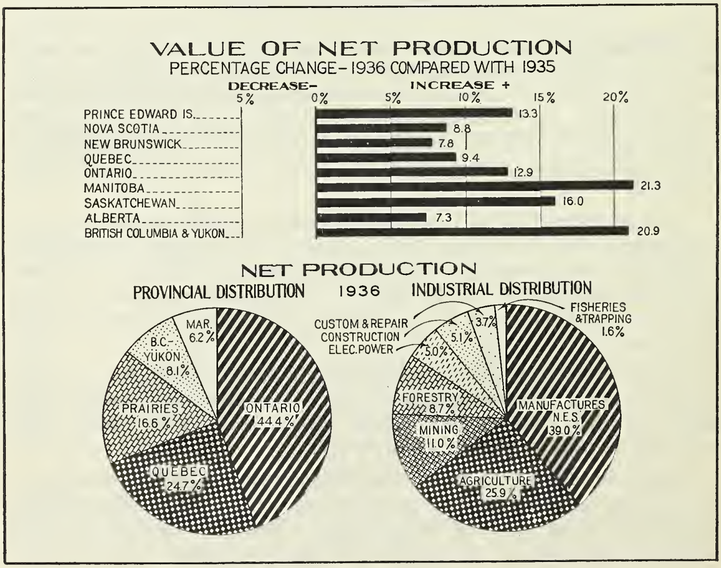
Ontario.—The net value of manufacturing in Ontario during 1936, less duplication, was nearly half of the provincial total. Agriculture accounted for 20 p.c. with a net value of $234,620,000. Mining advanced to 12·8 p.c., while forestry remained unchanged in relation to the net total.

Prairie Provinces.—Agriculture predominated in the Prairie Provinces, supplying over 62 p.c. or nearly two-thirds of the net production in 1936. Manufacturing accounted for one-sixth of the regional output. Mining increased 22·8 p.c. over 1935 and represented 8 p.c. of the value of the area's net product.

British Columbia and Yukon.—The net output from manufacturing in British Columbia during 1936 was $87,780,000 or 40·6 p.c. of the provincial production, but over half of this amount was derived from manufacturing processes closely associated with primary industries, such as logging, mining, and fisheries. Eliminating this duplication, manufactures comprised 21·4 p.c. of the provincial net, whereas forestry supplied 25·4 p.c., mining 17·8 p.c., agriculture 12·9 p.c., and fisheries 6·5 p.c.

Tables 4 and 4A give the details of gross and net production by industries for each province in the years 1935 and 1936. Only in Saskatchewan, Alberta, and Prince Edward Island does agriculture rank in first place, manufactures surpassing this primary industry in most of the other six provinces. Tables 5 and 5A present some very interesting comparisons. In Nova Scotia, indeed, during 1936 mining was more productive in net value than agriculture, while in New Brunswick forestry ranked also above agriculture in the addition of new wealth. In British Columbia-Yukon, the products of forestry and mining, with manufacturing, ranked above agriculture.

On a provincial percentage basis mining is very much more important in Nova Scotia than it is in the premier mining province of Ontario. Likewise, the generation of electric power is relatively a more important industry in Nova Scotia, New Brunswick, Manitoba, and in British Columbia than it is in Ontario. While manufacturing is of first importance in Ontario and Quebec, it is also of major relative concern in Nova Scotia.



4.—Gross and Net Values of Production, Classified for each Province, by Industries, 1935.

NOTE.—Gross and net figures for 1935 have been revised since the publication of the 1938 Year Book. For Dominion totals, see Tables **1** and **2**.

GROSS PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Agriculture	13,259,000	27,264,000	25,402,000	175,074,000	315,256,000
Forestry	637,654	12,625,924	27,931,167	126,578,806	89,945,747
Fisheries	1,301,848	10,758,244	4,768,162	2,304,071	2,852,007
Trapping	2,713	425,086	80,080	1,050,591	1,604,537
Mining	Nil	21,965,963	2,798,654	73,460,933	211,392,537
Electric power	278,727	5,096,453	3,184,329	47,808,550	43,667,485
Construction	1,190,030	15,657,298	9,988,340	58,309,829	90,848,941
Custom and repair	803,947	4,873,862	3,864,778	38,722,316	68,556,077
Manufactures[1]	3,048,030	61,453,452	52,845,533	765,842,452	1,363,396,503
Totals[1]	**19,269,535**	**145,284,538**	**107,542,475**	**1,126,333,296**	**1,962,942,914**

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.[2]
	$	$	$	$
Agriculture	59,368,000	161,273,000	138,481,000	37,054,000
Forestry	3,623,597	2,751,537	4,283,228	73,054,712
Fisheries	1,258,335	252,059	225,741	21,666,282
Trapping	968,003	1,080,760	1,064,968	2,600,593
Mining	18,760,758	5,206,021	21,614,954	55,894,763
Electric power	6,729,818	4,377,205	4,756,985	11,278,402
Construction	10,473,633	5,061,354	10,183,322	13,836,126
Custom and repair	8,923,955	5,118,017	6,508,450	12,576,702
Manufactures[1]	109,630,236	42,038,181	67,841,746	185,229,255
Totals[1]	**201,426,835**	**218,126,039**	**246,617,139**	**318,574,446**

NET PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Agriculture	7,599,774	15,940,970	12,480,913	109,300,670	207,109,010
Forestry	451,044	7,857,510	16,654,061	71,772,351	51,391,346
Fisheries	822,322	7,261,944	3,186,673	1,874,768	2,852,007
Trapping	2,713	425,086	80,080	1,050,591	1,604,537
Mining	Nil	14,207,064	2,467,339	33,679,150	130,220,051
Electric power	238,354	4,332,290	3,024,999	47,805,074	43,645,644
Construction	666,790	9,688,391	5,834,831	32,859,784	50,649,333
Custom and repair	460,203	2,907,415	2,302,780	23,852,366	41,230,853
Manufactures[1]	1,099,451	26,197,576	24,360,889	339,363,685	609,853,133
Totals[1]	**11,031,987**	**82,577,156**	**58,946,355**	**600,775,158**	**1,048,129,100**

For footnotes, see end of table, p. 184.

4.—Gross and Net Values of Production, Classified for each Province, by Industries, 1935—concluded.

NET PRODUCTION—concluded.

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.[2]
	$	$	$	$
Agriculture	35,094,845	107,632,431	97,375,840	25,332.547
Forestry	2,310,346	1,995,414	3,113,848	42,999,324
Fisheries	1,258,335	252,059	225,741	12,535,207
Trapping	968,003	1,080,760	1,064,968	2,600,593
Mining	9,040,591	2,869,351	16,738,472	29,359,250
Electric power	6,657,635	3,616,251	4,572,180	11,230,651
Construction	5,083,452	2,772,833	5,524,813	7,735,062
Custom and repair	5,602,621	3,251,291	4,078,645	8,025,268
Manufactures[1]	39,567,839	13,042,743	23,780,134	73,633,833
Totals[1]	**101,253,414**	**134,000,749**	**153,271,341**	**179,079,123**

[1] The totals for manufactures involve duplicated amounts which were deducted in computing the total production for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. The following are the amounts of the duplication by provinces: Prince Edward Island, gross $1,252,414, net $308,664; Nova Scotia, gross $14,835,744, net $6,241,090; New Brunswick, gross $23,320,568, net $11,446,210; Quebec, gross $162,818,252, net $60,783,281; Ontario, gross $224,576,920, net $90,426,814; Manitoba, gross $18,309,500, net $4,330,253; Saskatchewan, gross $9,032,095, net $2,512,384; Alberta, gross $8,343,255, net $3,203,300; British Columbia and Yukon, gross $94,616,389, net $34,372,612. [2] The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was $3,375,554 gross and $3,110,950 net in 1935.

4A.—Gross and Net Values of Production, Classified for each Province, by Industries, 1936.

Note.—For Dominion totals, see Tables 1 and 2.

GROSS PRODUCTION.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Agriculture	15,765,000	29,039,000	30,408,000	189,970,000	360,329,000
Forestry	638,621	13,087,653	28,699,912	148,143,119	103,806,452
Fisheries	1,412,791	12,192,912	5,294,485	2,557,194	3,209,422
Trapping	4,056	348,971	68,509	1,449,285	1,796,079
Mining	27,663	24,754,077	2,566,861	93,260,522	260,228,171
Electric power	299,229	5,216,692	3,307,106	45,937,802	52,012,533
Construction	816,141	15,434,295	11,982,253	67,902,087	108,260,433
Custom and repair	833,955	5,107,327	4,053,123	40,867,617	72,212,732
Manufactures[1]	3,311,223	67,784,970	56,225,201	863,687,389	1,547,551,931
Totals[1]	**21,685,424**	**156,653,932**	**118,176,103**	**1,263,428,385**	**2,234,703,431**

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.[2]
	$	$	$	$
Agriculture	77,659,000	185,532,000	149,000,000	41,869,000
Forestry	5,231,995	2,553,871	4,452,459	93,678,040
Fisheries	1,667,371	367,025	309,882	24,070,053
Trapping	936,097	931,175	1,142,906	2,537,247
Mining	16,674,438	9,547,510	22,461,422	67,812,057
Electric power	7,246,220	4,651,782	4,945,917	12,247,892
Construction	12,929,022	8,314,668	9,611,860	22,789,641
Custom and repair	9,463,465	5,387,351	6,902,907	13,374,099
Manufactures[1]	122,050,502	51,604,510	74,052,010	216,136,078
Totals[1]	**234,807,096**	**256,461,584**	**263,239,084**	**384,229,586**

For footnotes, see end of table, p. 185.

4A.—Gross and Net Values of Production, Classified for each Province, by Industries, 1936—concluded.

NET PRODUCTION—concluded.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Agriculture	9,148,736	16,195,664	15,618,704	111,742,408	234,619,984
Forestry	472,513	8,537,693	16,266,798	84,786,485	58,390,676
Fisheries	877,466	8,202,308	3,542,465	2,030,640	3,209,422
Trapping	4,056	348,971	68,509	1,449,285	1,796,079
Mining	27,663	19,108,641	2,324,747	44,823,567	151,874,462
Electric power	252,213	4,318,327	3,143,900	45,912,902	51,984,246
Construction	490,457	9,290,891	7,232,337	34,834,536	55,388,095
Custom and repair	478,950	3,062,802	2,426,415	25,320,597	43,675,900
Manufactures[1]	1,055,201	27,788,510	23,781,487	377,514,998	686,470,917
Totals[1]	**12,495,760**	**89,823,005**	**63,573,236**	**656,952,315**	**1,183,844,782**

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.[2]
	$	$	$	$
Agriculture	48,858,792	122,872,088	103,464,536	27,858,088
Forestry	3,303,840	1,937,413	3,303,180	54,938,963
Fisheries	1,667,371	367,025	309,882	14,027,484
Trapping	936,097	931,175	1,142,906	2,537,247
Mining	9,366,496	5,720,747	20,104,417	38,621,619
Electric power	7,171,331	3,903,212	4,683,604	12,191,652
Construction	6,784,027	5,093,281	5,414,177	11,323,361
Custom and repair	5,982,059	3,440,037	4,351,739	8,595,213
Manufactures[1]	45,015,577	15,185,500	25,000,136	87,780,346
Totals[1]	**122,874,879**	**155,439,051**	**164,409,521**	**216,449,140**

[1] The totals for manufactures involve duplicated amounts which were deducted in computing the total production for each province. The duplication arises from including in two places a number of industries which may be regarded as extractive or as manufacturing processes. The following statement gives the amounts of the duplication by provinces: Prince Edward Island, gross $1,423,255, net $311,495; Nova Scotia, gross $16,311,965, net $7,030,802; New Brunswick, gross $24,429,347, net $10,832,126; Quebec, gross $190,346,630, net $71,463,103; Ontario, gross $274,703,322, net $103,564,999; Manitoba, gross $19,051,014, net $6,210,711; Saskatchewan, gross $12,428,308, net $4,011,427; Alberta, gross $9,640,279, net $3,365,056; British Columbia and Yukon, gross $110,284,521, net $41,424,833. [2] The value of production in Yukon, mainly in the mining and trapping industries (including similar industries of the N.W.T.), was $4,038,105 gross and $3,401,279 net in 1936.

5.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1935.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	68·90	19·30	21·17	18·19	19·76
Forestry	4·09	9·52	28·25	11·94	4·90
Fisheries	7·45	8·79	5·41	0·31	0·27
Trapping	0·02	0·51	0·13	0·18	0·15
Mining	Nil	17·20	4·19	5·61	12·43
Electric power	2·16	5·25	5·13	7·96	4·16
Construction	6·04	11·74	9·90	5·47	4·83
Custom and repair	4·17	3·52	3·91	3·97	3·93
Manufactures, *n.e.s.*	7·17	24·17	21·91	46·37	49·57
Totals	**100·0**	**100·00**	**100·00**	**100·00**	**100·00**
Totals, Manufactures (Percentages to Grand Totals of Net Production)	9·97	31·72	41·33	56·49	58·18

5.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1935—concluded.

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.[1]	Canada.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	34·66	80·31	63·53	14·15	26·09
Forestry	2·28	1·49	2·03	24·02	8·38
Fisheries	1·24	0·19	0·15	7·00	1·28
Trapping	0·96	0·81	0·69	1·45[1]	0·37
Mining	8·93	2·14	10·92	16·39[1]	10·07
Electric power	6·58	2·70	2·98	6·27	5·28
Construction	5·02	2·07	3·60	4·32	5·10
Custom and repair	5·53	2·43	2·66	4·48	3·87
Manufactures, *n.e.s.*	34·80	7·86	13·44	21·92	39·56
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**
Totals, Manufactures (Percentages to Grand Totals of Net Production)	39·08	9·73	15·52	41·12	48·58

[1] Includes the trapping and mining industries of the Northwest Territories.

5A.—Percentage of the Value of the Net Production in each Industry to the Total Net Production for each of the Provinces in 1936.

Industry.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	73·22	18·03	24·57	17·01	19·82
Forestry	3·78	9·51	25·59	12·91	4·93
Fisheries	7·02	9·13	5·57	0·31	0·27
Trapping	0·03	0·39	0·11	0·22	0·15
Mining	0·22	21·27	3·66	6·82	12·83
Electric power	2·02	4·81	4·95	6·99	4·39
Construction	3·93	10·34	11·37	5·30	4·68
Custom and repair	3·83	3·41	3·82	3·85	3·69
Manufactures, *n.e.s.*	5·95	23·11	20·36	46·59	49·24
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**
Totals, Manufactures (Percentages to Grand Totals of Net Production)	8·44	30·94	37·41	57·46	57·99

Industry.	Manitoba.	Saskatchewan.	Alberta.	British Columbia and Yukon.[1]	Canada.
	p.c.	p.c.	p.c.	p.c.	p.c.
Agriculture	39·76	79·04	62·92	12·88	25·90
Forestry	2·69	1·25	2·01	25·38	8·70
Fisheries	1·36	0·24	0·19	6·48	1·28
Trapping	0·76	0·60	0·70	1·17[1]	0·35
Mining	7·62	3·68	12·23	17·84[1]	10·95
Electric power	5·84	2·51	2·85	5·63	5·01
Construction	5·52	3·28	3·29	5·23	5·10
Custom and repair	4·87	2·21	2·65	3·97	3·65
Manufactures, *n.e.s.*	31·58	7·19	13·16	21·42	39·06
Totals	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**
Totals, Manufactures (Percentages to Grand Totals of Net Production)	36·64	9·77	15·21	40·55	48·37

[1] Includes the trapping and mining industries of the Northwest Territories.

CHAPTER VIII.—AGRICULTURE.

Agriculture, including stock raising and horticulture, is the chief single industry of the Canadian people, employing, in 1931, 28·7 p.c. of the total gainfully occupied population and 33·9 p.c. or over one-third of the gainfully occupied males. In addition, it provides the raw material for many Canadian manufactures, and its products in raw or manufactured form constitute a very large percentage of Canadian exports. For a statement of the occupied and the available agricultural lands in Canada, see p. 27 of this volume.

Following an introductory outline of the historical background of Canadian agriculture, this chapter treats of current governmental activities—Dominion, in as much detail as space will permit (to utilize such space to the best advantage, the system of special articles not repeated from year to year has been adopted) and Provincial by outlines and references to provincial sources of information. Comprehensive statistics of agriculture, collected and compiled by the Agricultural Branch of the Dominion Bureau of Statistics and covering Canada as a whole, close the chapter. These include data on agricultural revenue and wealth, field crops, farm live stock and poultry, dairying, fur farming, fruit, special crops, farm labour and wages, prices, miscellaneous, and, since Canadian exports of agricultural commodities are sold in the world market, a review of world statistics of agriculture, compiled from the publications of the International Institute of Agriculture.

The Historical Background of Canadian Agriculture.*—The actual beginning of agriculture in Canada cannot be stated definitely, as crude attempts at cultivation by the native Indians were reported by the earliest recorded visitors to the country. Jacques Cartier in 1535 reported that the Indians around Hochelaga, at the foot of Mount Royal, where Montreal now stands, were cultivating small patches of land for the production of maize. The Huron Indians, living in the area close to lake Huron and Georgian bay, are also reported to have been growing corn, peas, and beans when first visited by white adventurers.

Since the arrival of the first French colonists to Acadia, Canadian agriculture has gone through several rather distinct stages: the early settlements in the Maritime Provinces and Quebec with comparatively slow development until 1750; from 1750 to 1850 settlement of Upper and Lower Canada was in full swing and agricultural growth was steady if not rapid; after Confederation and the completion of the Canadian Pacific Railway in 1886, the development of Western Canada was rapid and agriculture in Eastern Canada went through a period of adjustment in the light of the development in the western provinces.

Historical information dealing with the first period of settlement is found chiefly in the reports of early visitors to the country and early records of settlement schemes. The first recorded white settlement in Canada was at Port Royal, now Annapolis, Nova Scotia, by a group of Frenchmen in 1605. Here the settlers cleared and cultivated small plots of land on which they grew maize, pumpkins, and beans. Cows were brought out by Poutrincourt in 1606. Lescarbot, in a history of New France, makes the following comments on the agriculture of the area: "Yet it is well to say here, that our French domestic animals prosper very well in those parts. We had hogs which multiplied abundantly; . . . we had but one sheep which enjoyed the best possible health, although he was not shut up at night, but was in the midst of our yard in winter time. M. de Poutrincourt had him twice shorn and the wool of the second year was recorded in France two sous a pound better than that of the first . . . . God blessed our labours, and gave us fair wheat, rye, barley, oats, peas, beans, hemp, turnips and garden herbs; and this so plentifully that the rye was as tall as the tallest man that may be seen, and we feared that this height would hinder it bringing forth seed, but it had fructified so well, that one French grain sowed there yielded such ears of corn that, by the testimony of my lord the Chancellor, neither the island of Sicily nor the country of Beauce yielded anything finer. . . ". *

---

* This material has been contributed by G. S. H. Barton, C.M.G., B.S.A., D.Sc.A., Deputy Minister, Department of Agriculture, Ottawa.

Growth in the Acadian region was slow, however, and the Census of 1671 shows only 441 Acadians, having 429 arpents† under cultivation with 866 cattle, 407 sheep, and 36 goats. Early in the eighteenth century the French began to dyke the marshes of the Minas basin where they were able to secure level lands which did not require clearing and which proved very fertile for the production of grains and grasses. Reports of the agricultural technique of this period indicate that the wooded land was cleared by cutting off the timber about three feet above the ground. The trees were left to dry and then burnt off. In the fall, rye was seeded among the stumps and the next year potatoes were planted. After three or four years the stumps were pulled with a yoke of oxen and eventually the land was ready for cultivation. The cattle of the period were said to be rather small, lively-looking animals with fine horns. The method of raising calves was somewhat surprising to English observers of the period. The calves were allowed to suck one side of the cow while the women milked the other side. This method was followed for the first four months, after which the calves were put out on grass. The womenfolk of the settlement were highly praised for their industry in making both linen and woollen cloth, which they bleached and dyed themselves. Candles, soap, and starch were also made in the home.

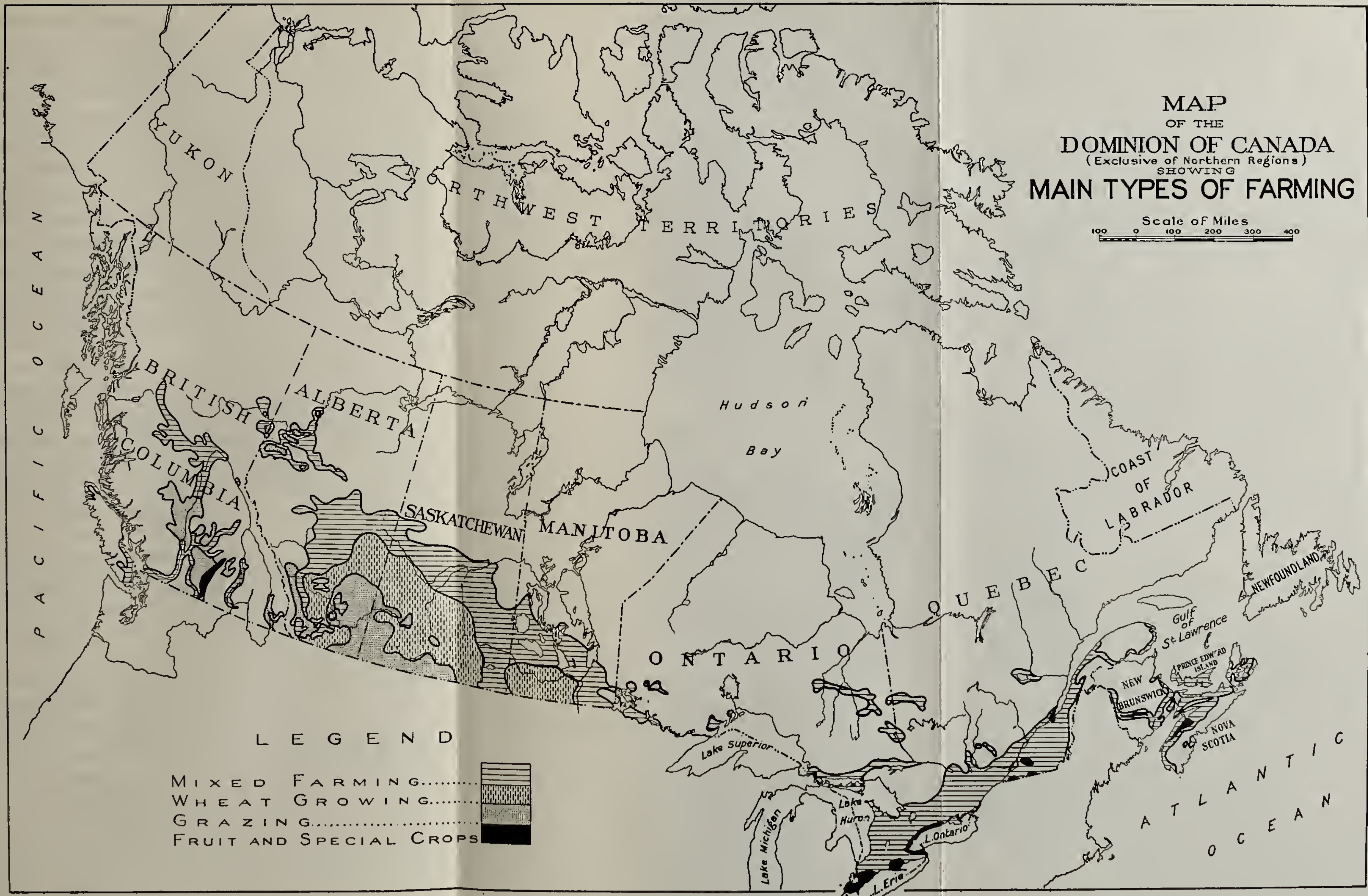
In the lower St. Lawrence valley some attempts at agriculture appear to have been begun as early as 1608 when Champlain, the founder of Quebec, came to the country. The first real farmer is said to have been Louis Hébert, who started farming in 1617 on the site of what is now Quebec city. Small settlements developed at various points along the St. Lawrence during these early days, but clearing was difficult and slow and it was a considerable time before the people were able to be self-sufficient in foodstuffs. Settlement of the so-called Eastern Townships of Quebec began shortly after 1800, the settlers coming chiefly from the New England States. However, it was not until after 1830 that they had satisfactory communication with Montreal and other parts of Canada. After that time agricultural progress was rapid in the area.

Agriculture in Upper Canada (Ontario) was also introduced by the French. The first settlement being established by Frontenac at Kingston in 1671. Difficulty of communication and transportation as well as the heavy work involved in clearing the land, kept settlement at a slow rate. When the United Empire Loyalists began coming into the area after 1780 settlement became much more active. The opening up of this part of the country was characterized by the fact that small isolated areas were settled in different sections of the province. The Talbot Settlement in Yarmouth township was settled under Colonel Talbot about 1820. The present county of Glengarry in eastern Ontario was settled by the Glengarry Fencible Regiment of Highlanders at about the same time. Other settlements were opened up around London, Niagara, Owen Sound, and Goderich. Roads were opened between settlements and eventually the intervening country was settled. By 1852 there were close to 100,000 farms in the province. Reports of the work of these early settlers

---

* Select Documents in Canadian Economic History, 1497-1783, H. A. Innis, University of Toronto Press, p. 61.

† An arpent is the equivalent of 0·84 acre.



MAP
OF THE
DOMINION OF CANADA
(Exclusive of Northern Regions)
SHOWING
MAIN TYPES OF FARMING

Scale of Miles
100 0 100 200 300 400
YUKON
NORTHWEST TERRITORIES
PACIFIC OCEAN
BRITISH COLUMBIA
ALBERTA
SASKATCHEWAN
MANITOBA
Hudson Bay
COAST OF LABRADOR
QUEBEC
NEWFOUNDLAND
Gulf of St Lawrence
PRINCE EDW'AD ISLAND
NEW BRUNSWICK
NOVA SCOTIA
ONTARIO
Lake Superior
Lake Michigan
Lake Huron
L. Ontario
L. Erie
ATLANTIC OCEAN
LEGEND
Mixed Farming
Wheat Growing
Grazing
Fruit and Special Crops

of the second yea
the first . . . . Go
peas, beans, hemp
was as tall as the t
hinder it bringing
sowed there yielde
lor, neither the isla

Growth in the
only 441 Acadians,
and 36 goats. Ea
of the Minas basin
clearing and whic
Reports of the ag
was cleared by cut
were left to dry a
and the next year
pulled with a yoke
cattle of the period
The method of ra
period. The calve
the other side. T
the calves were p
praised for their in
and dyed themsel

In the lower
been begun as ear
country. The firs
ing in 1617 on the
various points alo
difficult and slow
self-sufficient in
Quebec began sho
States. However,
munication with
tural progress was

Agriculture i
The first settleme
of communication
the land, kept sett
coming into the a
up of this part of t
were settled in di
mouth township w
of Glengarry in ea
Highlanders at a
London, Niagara,
ments and event
close to 100,000 fa

---

* Select Document
Press, p. 61.
† An arpent is the

tell of the great difficulties encountered in clearing off the heavy timber. Very often the trees were felled and burned; the houses were mainly of log construction and the principal means of subsistence was flour and pork, until vegetables could be grown. In Upper Canada the pioneer farmers soon found it necessary to construct barns in which to store grain and hay. These were constructed of logs, unless a sawmill was located in the vicinity. Settlers often had to transport their grain twenty or thirty miles to the grist mill to be ground, a work which often required several days. A market for surplus produce was generally found among the more recent settlers who were not yet able to produce for themselves, or by trading with merchants for clothing and necessary groceries. A description of the primitive ploughs used in Loyalist times is given in H. Y. Hind's *Eighty Years' Progress:* "We find among the donations of George III to the U. E. Loyalists the old English plough. It consisted of a small piece of iron fixed to the coulter, having the shape of the letter L, the shank of which went through the wooden beam, the foot forming the point which was sharpened for use. One handle and a plank split from a curved piece of timber, which did the duty of a mold board, completed the crude implement. At that time the traces and leading lines were made of the bark of the elm or basswood, which was manufactured by the early settlers into a strong rope".*

Other early references to the machinery of the time include a report of an invention by S. Williams of Whitby, which he called "a harvesting machine, which gathers, threshes and rough cleans wheat, barley, etc., at a rate of a bushel in three minutes". It is also of interest to find in a report printed in the Montreal *Gazette* in 1821, reference to the high quality of Canadian wheat. The report states that bakers of Scotland and England found the wheat particularly valuable for mixing with local wheats. Exports of Canadian wheat and wheat flours exceeded the equivalent of over one million bushels in 1802. That was an exceptional year, however, and was not surpassed until 1840. The successful production of apples and peaches is reported as early as 1820.

Efforts to improve agriculture in Eastern Canada through agricultural societies were made at an early date. One of the first of these was a society founded by Lord Dorchester in 1789, which published pamphlets on agriculture. Through the efforts of John Young in Nova Scotia, a Central Agricultural Society was formed in 1818. Other societies followed in Prince Edward Island and New Brunswick. The first agricultural school in Canada was opened in 1859 at Ste. Anne de la Pocatière.

An interesting point in the development of agriculture in Upper Canada was the persistent attempts in early years on the part of the Government to encourage the production of hemp. Several Acts were passed such as the one of 1804, entitled, "An Act for the Granting to His Majesty a certain sum of Money for the Further Encouragement of Growth and Cultivation of Hemp within this Province and the Exportation Thereof". Similar Acts appear in the Statutes for many years, but the results do not appear to have been very satisfactory. Other early legislation dealt with the inspection of flour, pot and pearl ashes, and other commodities. An Act passed in 1805 provided regulations for the curing, packing, and inspection of beef; an Act of 1807 granted to His Majesty duties on licences to hawkers, pedlars, and petty chapmen. Agriculture in Eastern Canada followed a wide diversification of production until about the beginning of the twentieth century. After that time the production of cereals in surplus quantities shifted to the newly opened provinces of the West and farmers of the East tended more and more towards live-stock production with some specialized crops.

---

* Select Documents in Canadian Economic History, 1783-1885, H. A. Innis and A. R. M. Lower, University of Toronto Press, p. 59.

The agricultural history of Western Canada dates back to the Selkirk Settlement along the Red river in Manitoba in 1812. These settlers experienced much difficulty, not only with Indians, but also because of the rivalry between the Northwest Company and the Hudson's Bay Company. Population grew only slowly and there was little real agricultural development until after the railway reached St. Boniface, opposite Winnipeg, in 1878. After the completion of the Canadian Pacific Railway in 1886, the settlement and consequent agricultural development of all Western Canada was very rapid. Many settlers came from the eastern provinces of Canada as well as from the United States, Great Britain, and European countries. Settlers from Eastern Canada and the United States often took stock and equipment with them and although they found it necessary to change many of their farm practices to meet the new conditions of soil and climate, they soon built up large farms and wheat production for export became increasingly important. In the short history of agriculture on the prairies there have been many important developments in technique with a decided tendency towards mechanization. More recently the type of farming in Manitoba and some sections of the other two provinces has been changing with more stress being placed on live stock and somewhat less on wheat.

Agriculture in British Columbia is reported to have started in the Fraser Lake district about 1810. The cultivated area, however, was small and expansion was hampered by the rugged nature of the country as well as the heavy forest covering. The Hudson's Bay Company maintained a number of farms in and around Fort Vancouver and on Vancouver island in the early days. Agriculture received indirect impetus from the Cariboo gold rush in the 'fifties in supplying produce to the camps. The first fruit-growing in the Okanagan valley was started at Penticton in 1864. It was not until the 'eighties that commercial plantings took place. Since that time this area has built up an enviable reputation for the production of apples and other fruits.

The period of rapid expansion and settlement in Canadian agriculture terminated with the beginning of the depression of the nineteen-thirties. Had not the War intervened, and thus restricted settlement, this period might have arrived somewhat earlier. With the sudden cessation of expansion and the strain imposed on the whole national economy arising out of maladjustments following on the world crisis, Canadian agriculture entered a new historical phase.

Section 1.—Government in Relation to Agriculture.

It is provided in Section 95 of the British North America Act that "in each province the Legislature may make laws in relation to agriculture in the province"; it is also "declared that the Parliament of Canada may from time to time make laws in relation to agriculture in all or any of the provinces; and any law of the Legislature of a province relative to agriculture . . . shall have effect in and for the province as long and as far only as it is not repugnant to any Act of the Parliament of Canada".

As a result of this provision, there exist at the present time Departments of Agriculture, with Ministers of Agriculture at their heads, both in the Dominion and in each of the nine provinces, though in two provinces the portfolio of agriculture is combined with one or more other portfolios in the hands of a single Minister.

Subsection 1.—The Dominion Government.

A short sketch of the functions of the Dominion Department of Agriculture was published at pp. 212-223 of the 1936 Year Book, and an outline of agricultural progress in Canada and the Dominion Experimental Farms System appeared at pp. 221-228 of the 1937 Year Book. In the 1938 Year Book a special article on the Prairie Farm Rehabilitation Program of the Dominion Government appeared at pp. 223-230. This year the problems of the Entomological Branch of the Dominion Department of Agriculture, in controlling noxious forest insects are reviewed in a special article which appears in the chapter on Forestry at pp. 254 to 263, since it is closely related to the subject of forest resources.

CANADIAN FARM LOAN BOARD.*

This Board was appointed by the Governor in Council under the provisions of the Canadian Farm Loan Act (c. 66, R.S.C. 1927, as amended by c. 46, Statutes of 1934, and c. 16, Statutes of 1935) and administers a system of long-term mortgage credit for farmers throughout Canada as an agency of the Crown in the right of the Dominion.

The Board is empowered to loan money to farmers for the payment of debts, for the purchase of farm equipment and live stock, to assist in the purchase of farm lands, for farm improvements or for any other purpose considered as improving the value of the land for agricultural purposes.

Loans may be granted on the security of first mortgages on farm lands actually operated by the borrower up to an amount not exceeding 50 p.c. of the appraised value of such farm lands, but, in any event, not in excess of $5,000 and such loans are repayable on an amortized plan of repayment over a period not exceeding 25 years.

In virtue of amendments to the Act, enacted in 1935, the Board is also empowered to make additional advances to farmers, who, having obtained a first-mortgage loan from the Board, require additional funds, the amount of such additional advance not to exceed 50 p.c. of the amount of the first mortgage loan, nor the aggregate of first and second mortgage loans to exceed two-thirds of the appraised value of the farm lands mortgaged as security for the loan, nor in any event an aggregate amount of $6,000.

The capital requirements of the Board are provided as follows:—

(*a*) Initial capital advance from the Government in the amount of $5,050,000.

(*b*) Sale to the Government of the capital stock of the Board equal to 5 p.c. of the loans made by the Board.

(*c*) Sale of bonds secured by farm mortgages. At the present time these bonds are being sold to the Government on a 3½ p.c. interest basis with a term of 25 years. Provision is made for the guarantee by the Government of the principal of and the interest on the bonds of the Board.

The rate of interest charged by the Board on its loans is determined by the rate of interest yielded by the latest series of such bonds increased by an allowance sufficient, in the judgment of the Board, to provide for expenses of operation and reserves for losses. The current rate of interest on loans made by the Board is 5 p.c. on first-mortgage loans and 6 p.c. on second-mortgage loans.

The first appointments to the Board were made in 1929 and loaning operations were then initiated in the provinces of British Columbia, Alberta, Manitoba, Quebec,

---

* Revised by A. H. Brown, Secretary, Canadian Farm Loan Board, Ottawa.

New Brunswick, and Nova Scotia. Following the amendments passed in 1935, loaning operations were initiated in that year in the provinces of Saskatchewan, Ontario, and Prince Edward Island. Loaning operations are now being carried on by the Board in all provinces of Canada. The head office of the Board is at Ottawa and a branch office has been established in each province.

Table **1** shows the total loaning operations of the Board to Mar. 31, 1938. Table **2** shows the total amount of loans approved, by provinces, in the fiscal years ended Mar. 31, 1937 and 1938.

1.—Applications for Farm Loans Received, Loans Approved, and Loans Disbursed, fiscal years ended Mar. 31, 1930-38.

Fiscal Year ended Mar. 31—	Applications Received.		Loans Approved.					Loans Paid Out.		
	No.	Amount.	First Mortgage.		Second Mortgage.		Total Amount.	First Mortgage.	Second Mortgage.	Total.
			No.	Amount.	No.	Amount.				
		$		$		$	$	$	$	$
1930.....	6,827	18,016,083	1,787	3,981,050	Nil	-	3,981,050	2,630,377	-	2,630,377
1931.....	3,372	8,650,182	1,458	3,212,400	"	-	3,212,400	3,517,489	-	3,517,489
1932.....	4,803	12,370,399	1,049	2,025,400	"	-	2,025,400	1,996,344	-	1,996,344
1933.....	1,776	3,939,393	536	982,600	"	-	982,600	1,276,114	-	1,276,114
1934.....	1,207	2,306,934	287	490,800	"	-	490,800	558,630	-	558,630
1935.....	2,456	5,496,817	532	880,900	72	44,600	925,500	537,974	9,233	547,207
1936.....	21,698	50,152,821	5,109	8,906,680	3,236	2,051,725	10,958,405	6,191,609	1,232,170	7,423,779
1937.....	9,821	21,872,723	5,099	9,004,850	2,835	1,504,150	10,509,000	9,269,188	1,804,968	11,074,156
1938.....	3,924	8,254,401	1,913	3,473,000	776	368,575	3,841,575	4,652,397	611,910	5,264,307

2.—Statement of Farm Loans Approved, with Details of Appraised Values of Security at Time of Loan, by Provinces, fiscal years ended Mar. 31, 1937 and 1938.

Province.	Amounts Approved.					Appraised Value of Security at Time of Loan.		
	First Mortgage.		Second Mortgage.		Total.	Land.	Buildings.	Total.
	No. of Loans.	Amount Approved.	No. of Loans.	Amount Approved				
		$		$	$	$	$	$
1937.								
Prince Edward Island.	125	185,550	72	35,250	220,800	333,949	163,548	497,497
Nova Scotia...........	172	243,850	59	33,050	276,900	433,521	266,912	700,433
New Brunswick.......	77	90,850	49	21,100	111,950	136,320	104,156	240,476
Quebec................	1,969	3,431,250	1,232	643,500	4,074,750	6,280,297	3,440,327	9,720,624
Ontario................	501	963,150	159	81,450	1,044,600	1,626,290	1,004,591	2,630,881
Manitoba..............	500	933,550	281	180,350	1,113,900	2,162,049	740,644	2,902,693
Saskatchewan.........	1,207	2,156,450	774	389,150	2,545,600	5,783,261	1,648,989	7,432,250
Alberta................	477	872,850	197	113,750	986,600	2,198,663	570,239	2,768,902
British Columbia......	71	127,350	12	6,550	133,900	317,374	158,692	476,066
Totals, 1937.....	**5,099**	**9,004,850**	**2,835**	**1,504,150**	**10,509,000**	**19,271,724**	**8,098,098**	**27,369,822**
1938.								
Prince Edward Island.	99	152,050	34	14,500	166,550	253,726	114,261	367,987
Nova Scotia...........	126	200,950	23	12,600	213,550	359,370	196,261	555,631
New Brunswick.......	33	37,400	18	5,800	43,200	56,608	40,046	96,654
Quebec................	202	440,700	97	47,300	488,000	758,232	419,189	1,177,421
Ontario................	418	831,000	107	54,800	885,800	1,346,610	707,750	2,054,360
Manitoba..............	210	395,900	108	56,400	452,300	875,718	286,015	1,161,733
Saskatchewan.........	448	742,650	303	132,175	874,825	1,986,881	621,161	2,608,042
Alberta................	312	538,100	76	37,600	575,700	1,232,858	310,224	1,543,082
British Columbia......	65	134,250	10	7,400	141,650	282,081	130,345	412,426
Totals, 1938.....	**1,913**	**3,473,000**	**776**	**368,575**	**3,841,575**	**7,152,084**	**2,825,252**	**9,977,336**

THE DOMINION MARKETING BOARD.

The Dominion Marketing Board was established under authority of c. 57 of the Statutes of 1934—The Natural Products Marketing Act, 1934. The chief powers of the Board, as stated in Sec. 4 of the Act, were: to regulate marketing and distribution of natural products of agriculture, the forests, sea, lake, or river, as may be designated by the Governor in Council; to conduct pools for the equalization of returns received from their sale and compensate any person for loss sustained in withholding such products from the market or for shipment to any country whose currency is depreciated in relation to Canadian currency; to assist the construction of marketing facilities by grant or loan. Following the change in Government after the elections of 1935, the present Administration filed a general reference of the social legislation passed by the former Administration to the Supreme Court and to the Privy Council. The Privy Council decision was made on Jan. 28, 1937. In both cases the legislation was declared *ultra vires* of the Dominion Government. All Orders in Council relating to the Marketing Board were subsequently revoked and the Dominion Marketing Board itself has not functioned since 1936. Prior to the reference being made, 22 cases were acted on by the Board.

Subsection 2.—Provincial Departments of Agriculture.*

Prince Edward Island.—The Department of Agriculture is presided over by a Minister, and the staff consists of a Deputy Minister and live-stock superintendent, a superintendent of women's institutes, a dairy superintendent, two field promoters and a field man for the fox industry. Assistance is given in co-operative marketing, promoting the live-stock industry, and encouraging exhibitions, the formation of boys' and girls' clubs and the welfare of agriculture generally.

Nova Scotia.—Agriculture in the province of Nova Scotia is administered by the Department of Agriculture, with the Head Office (Minister's Office) and those of the Director of Marketing and of the Land Settlement Board situated in Halifax. Many of the technical officials are situated at the Agricultural College and Farm, Truro, and other Divisions of the Department include: extension service, agricultural societies, associations, and exhibitions; dairying; poultry; live stock; entomology and botany; apiculture; animal pathology; agricultural engineering; and women's institutes.

New Brunswick.—The branches of the Department of Agriculture of New Brunswick are as follows: (1) live-stock and agricultural societies; (2) dairying; (3) herd improvement; (4) soils and crops; (5) poultry; (6) horticulture; (7) women's institutes; (8) agricultural representatives; (9) industry, immigration, and farm settlement; (10) elementary agricultural education; (11) beekeeping.

Quebec.—The administration of agricultural policies is entrusted to a number of services and sections as follows: extension work, which deals with all problems faced by the 98 agricultural county agents; rural economy; animal husbandry; health of animals; plant protection; agricultural education; domestic science; field husbandry; publicity; and administration. The Chief Technical Adviser is directly responsible to the Deputy Minister, who remains the main technical authority of the Department. Each service is divided into divisions dealing with minor problems. There are also many other activities such as the Quebec Farm Credit Bureau, agricultural merit competition, provincial dairy school, provincial handicraft school, etc. There is, therefore, for any kind of agricultural activity, a corresponding administrative service where accurate information may be obtained by interested persons.

---

* For publications of provincial Departments of Agriculture, see in the index the entry "Publications of Provincial Governments".

Ontario.—The Ontario Department of Agriculture includes the following branches: statistics and publications; agricultural and horticultural societies; live stock; women's institutes; dairy; fruit; agricultural representatives; crops, seeds, and weeds; Co-operation and Markets Branch; and the Milk Control Board. The Department is responsible for the administration of the Ontario Agricultural College, the Ontario Veterinary College, the Kemptville Agricultural School, the experimental farms at Guelph, Ridgetown, and Vineland, and demonstration farms at New Liskeard and Hearst.

Manitoba.—The Manitoba Department of Agriculture includes the following services and branches: agricultural extension, dairying, publications, statistics and weeds, live stock, the Debt Adjustment Board, and the Registrar of Co-operative Associations.

The Agricultural Extension Branch aids field-crop production, horticulture, beekeeping, poultry raising, suppression of insect outbreaks, boys' and girls' club work, and various home-making projects. It also directs the activities of rural agricultural representatives and supervises the work of agricultural societies, horticultural societies, and women's organizations. The Dairy Branch grades all cream supplied to creameries, supervises the activities of creameries and cheese factories and gives general support to the dairy industry. The Live Stock Branch licenses stallions and conducts projects and administers policies through which encouragement is given to the production of better types of animals.

Saskatchewan.—The Department of Agriculture includes branches dealing with: the agricultural representative service, live stock, field crops, dairying, statistics, co-operation and markets, and land utilization. There is also a bee division. The Live Stock Branch provides the organization for examining and licensing stallions, purchasing and selling cattle, sheep, and hogs to farmers on cash and credit terms in the pure-bred sire areas (areas created under statutory authority in order to eliminate undesirable sires and improve the quality of live stock), and registering brands for live stock. The poultry industry is promoted through a flock-culling service, a turkey-grading service, and an approved hatchery policy. The health of live stock is safeguarded in various ways and exhibits of animals are sent to the Royal Winter Fairs at Toronto. The Field Crops Branch aids in promoting good cropping and tillage practices as well as encouraging the use of good quality seed of cereal and forage crops; it arranges exchanges of commercial grain for pure seed of approved varieties under the Seed Exchange Plan, and provides measures for suppressing insect and weed pests. The Dairy Branch directs the grading of cream at all the creameries, promotes herd improvement through cow testing and administers the provisions of the Dairy Products Act with respect to licensing creamery operators, cream graders and testers, and the bonding of creameries. The Statistics Branch, in co-operation with the Dominion Bureau of Statistics, maintains a crop-reporting service and gathers annual data respecting crops and live stock of the province. The Co-operation and Markets Branch grants charters to co-operative associations under the Co-operative Associations Act, to marketing associations under the Co-operative Marketing Associations Act, and to credit unions under the Credit Union Act, promotes co-operative activities, including live-stock shipping and poultry marketing, provides an economic research service for co-operatives, licenses poultry dealers under the Live Stock and Live Stock Products Act, and publishes a fortnightly news letter dealing with co-operation and marketing. Under the Agricultural Representative Service, as established, the province is divided into districts where qualified men carry on promotional and educational work. The Apiary Division registers all beekeepers and promotes better management and practices. Agricultural societies are organized by, and grants are paid through, the Department, but direction of the activities of societies is centred in the College of Agriculture of the University of Saskatchewan. The Land Utilization Board, composed of representatives of several interested departments of government, facilitates the withdrawal of lands unsuitable for such use from arable farming.

Alberta.—The main services of the Alberta Department of Agriculture are rendered through its various branches to the live-stock, grain-growing, dairy, poultry, and mixed-farming industries. Apiculture and fur-farming are important among the minor agricultural pursuits. Agricultural extension is being encouraged through twelve District Agriculturists located at strategic points in the province; a women's home bureau organization, short courses and field days, and school fairs and junior club programs for the rural young people. The development of a horticultural station at Brooks where suitable varieties of ornamental and fruit trees are tested and propagated, is one of the Department's latest projects. Two schools of agriculture are maintained; crop reports and statistical information are published; weed control and production of registered seed are encouraged; and beef feeding organizations are receiving added support. The Department has also inaugurated a bull policy designed to improve the beef cattle, and a swine improvement policy is under consideration. The Department is co-operating with the University of Alberta, under the Dominion-Provincial Youth Training Plan, to hold 36 short-course schools and it is supervising an intensive course in agriculture under Schedule "E" of this program.

British Columbia.—The Department of Agriculture deals with all matters of provincial concern connected with farming in its several phases. It consists of three main divisions, namely:—

(1) The Administration Division is responsible for the general direction of agricultural policies; the administration of legislative measures affecting agriculture; the supervision of agricultural extension programs; the collection of agricultural statistics; the preparation of agricultural and horticultural displays for showing at provincial, national, and international exhibitions and assistance to fall fairs. It also distributes departmental publications; supervises soil-survey work; apiary inspection; junior club projects; farmers' and women's institutes. The Markets Branch is included in this Division.

(2) The Animal Industry Division has direct supervision over general live-stock work in the province, including live-stock promotion and improvement; brand inspection; nutritional studies; animal parasite control, and contagious diseases of animals control. This Division consists of live-stock, veterinary, dairy, and poultry branches as well as the Brand Inspection Service. A pure-bred sire purchase policy is administered under which it is possible for farmers' institutes to purchase pure-bred sires under special financial arrangements with the Department. In the Dairy Branch there is a herd improvement service operating through Cow Testing Associations; official lists are maintained of pure-bred dairy sires which have five or more daughters with production records.

(3) The Plant Industry Division includes horticulture, plant pathology, entomology, and field-crop branches. Services of these branches include the general direction of fruit and vegetable production and various surveys dealing with

orchards, small fruits and bulb acreages, as well as greenhouse areas; the suppression or control of insect pests and plant diseases; inspection and control of noxious weeds; supervision of Field Crop Union activities; local and provincial seed fairs and educational work connected with horticulture and field-crop production.

The Extension Service of the provincial Department of Agriculture maintains District Horticulturists, District Agriculturists, and District Field Inspectors at suitable points. These extension officials feature either animal industry or plant industry, depending upon the predominating type of farming carried on in the several districts. Junior Club projects are organized and supervised by extension officials in practically all agricultural areas of the province; there are now more than one hundred clubs participating.

The detailed survey of orchard soils in the Okanagan valley which was started in 1931 as a joint undertaking between the Dominion Experimental Farms and the provincial Department of Agriculture, has been followed by reconnaissance surveys of lands adjacent to the areas formerly examined. Soil maps and soil reports covering more than half a million acres in the Lower Fraser valley and a similar area in the Okanagan valley have been prepared and new areas in central British Columbia are being examined.

Subsection 3.—Provincial Agricultural Colleges and Experimental Stations.

Under the above heading, outlines of the work done at provincial agricultural colleges and experimental stations were given by provinces at pp. 198-203, inclusive, of the 1930 Year Book. The interested reader is referred to that volume, and to the following provincial publications, for information concerning courses and programs of work at these institutions:—

Nova Scotia.—Annual Report of the Department of Agriculture for Nova Scotia; Calendar of the College of Agriculture, Truro, N.S.

Quebec.—Announcement of Macdonald College, Macdonald College, Que., and the prospectuses and annual announcements of the College of Agriculture, Ste. Anne de la Pocatière, and the Oka Agricultural Institute and Veterinary School, La Trappe, Que.

Ontario.—Annual Report of the Ontario Agricultural College and Experimental Farm, Guelph, Ont.

Manitoba.—Annual Report of the Manitoba Agricultural College, Winnipeg, Man.

Saskatchewan.—Annual Report of the College of Agriculture, University of Saskatchewan, Saskatoon, Sask.

Alberta.—Annual Report of the College of Agriculture, University of Alberta, Edmonton, Alta.

British Columbia.—Annual Report of the Faculty of Agriculture, University of British Columbia, Vancouver, B.C.

Section 2.—Statistics of Agriculture.*

Crop-Reporting Service.—The voluntary crop-reporting service of the Dominion Government, which has been in operation since 1908, has for its object the issue of accurate, timely, and independent reports on crop conditions throughout the Dominion; first, in the interests of the general body of Canadian farmers; secondly, for the information and guidance of other interests allied to and dependent upon agriculture (interests represented by statesmen, economists, bankers, grain dealers, transportation agents, and others); and thirdly, for reporting to the International Institute of Agriculture at Rome (to which Canada is an adhering country) in return for reports on the production of other countries and of world totals which influence prices and consequently affect the interests of Canada. Supplementing the monthly reports from crop correspondents, the Bureau issues telegraphic crop reports utilizing the services of agriculturists throughout the Dominion. For the Prairie Provinces, these are issued every week from the latter part of May to the beginning of September while the reports on a Dominion-wide basis are issued every two weeks during the same period. The program of reports for 1939-40 is given in the Monthly Bulletin of Agricultural Statistics, January, 1939, pp. 54-56, and is also issued as a special leaflet.

---

* Revised in the Agricultural Branch, Dominion Bureau of Statistics. This Branch is concerned with both primary and secondary statistics of agriculture, including statistics of the production and distribution of agricultural commodities. The primary statistics relate mainly to the reporting of crop conditions, crop and live-stock estimates, values of farm lands, wages of farm labour, and monthly and annual prices received by farmers for their products. The secondary statistics relate to the marketing of grain and live stock, dairying, milling, and sugar industries and cold-storage holdings. A list of the publications of this Branch is given in Chapter XXIX, Section I, under "Production".

Annual Statistics.—In addition to the crop-reporting service, statistics of the areas under field crops and of the numbers of farm live stock are collected. This work has been conducted since 1918 by the Dominion Bureau of Statistics in co-operation with the Provincial Governments. The statistics are secured by schedules which are at present returned by about one-fifth of the farmers of Canada. They form the basis of the estimates for the whole of Canada. The results for wheat, oats, barley, rye, and flaxseed in the three Prairie Provinces are ready for publication in late July, while the results for the remaining crops and for the numbers of farm live stock are published in October and November. The areas, thus determined, when multiplied by the average yields per acre as reported by crop correspondents, form the basis of the total estimated production for each crop.

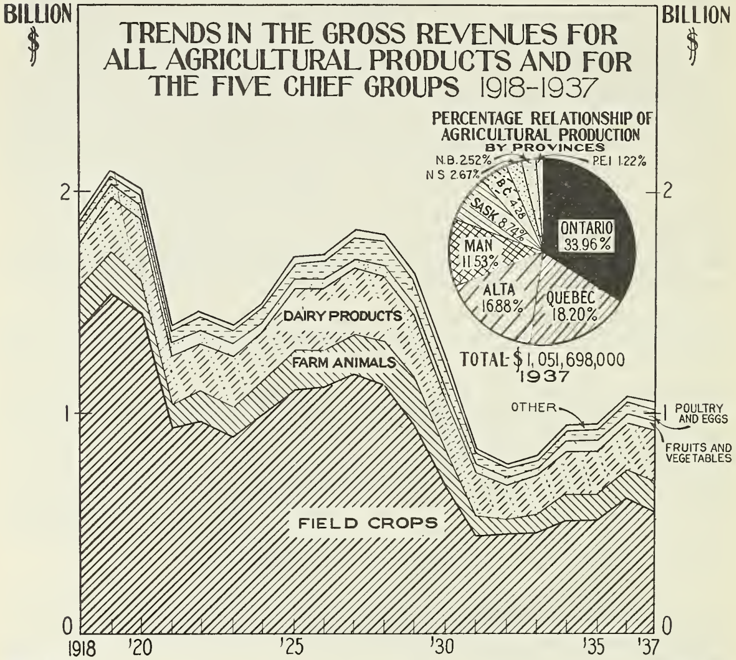
The June schedule covers the areas sown to field crops, the numbers of live stock and poultry on hand, and breeding and marketing intentions with regard to live stock and poultry. The December schedule contains practically the same items with the exception of field-crop areas.

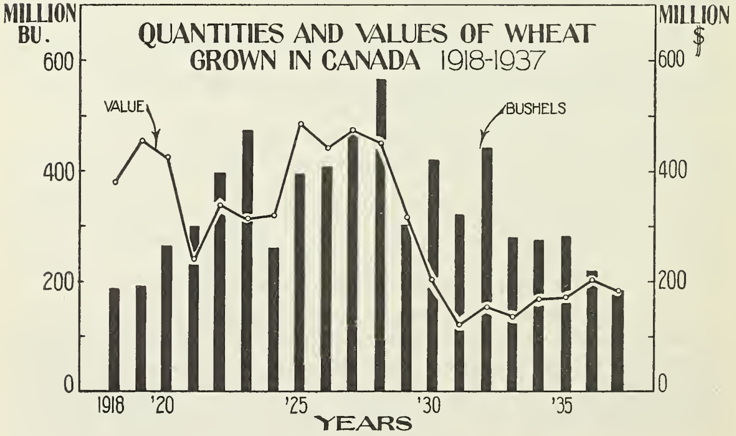
The schedules are distributed and collected through the agency of the rural schools in New Brunswick, Quebec, Ontario, Manitoba, and Saskatchewan, while in Prince Edward Island, Nova Scotia, Alberta, and British Columbia the schedules are sent direct to the farmer through the mail.

Monthly Bulletin of Agricultural Statistics.—Originally established in 1908 as the "Census and Statistics Monthly", but changed to its present title in April, 1917, this publication is now in its thirty-second year. It is the official organ not only for the monthly crop reports and annual statistics previously described, but also for statistics of dairying, eggs, fruit, apiculture, hops, tobacco, maple products, sugar beets, beet sugar, flax fibre, clover and grass seeds, visible supplies, prices, values, foreign agriculture, and other subjects in considerable variety.

Census Statistics.—In addition to the statistics collected annually, which are the subject of this section, valuable information is published following each decennial census. The total number of farms, their tenure, acreage, value, mortgage debt, farm population, farm machinery and facilities, etc., were treated at pp. 295-301 of the 1934-35 Year Book. A summary presentation of agricultural development since 1871 was given in Subsection 9, pp. 270-273 of the 1936 Year Book.

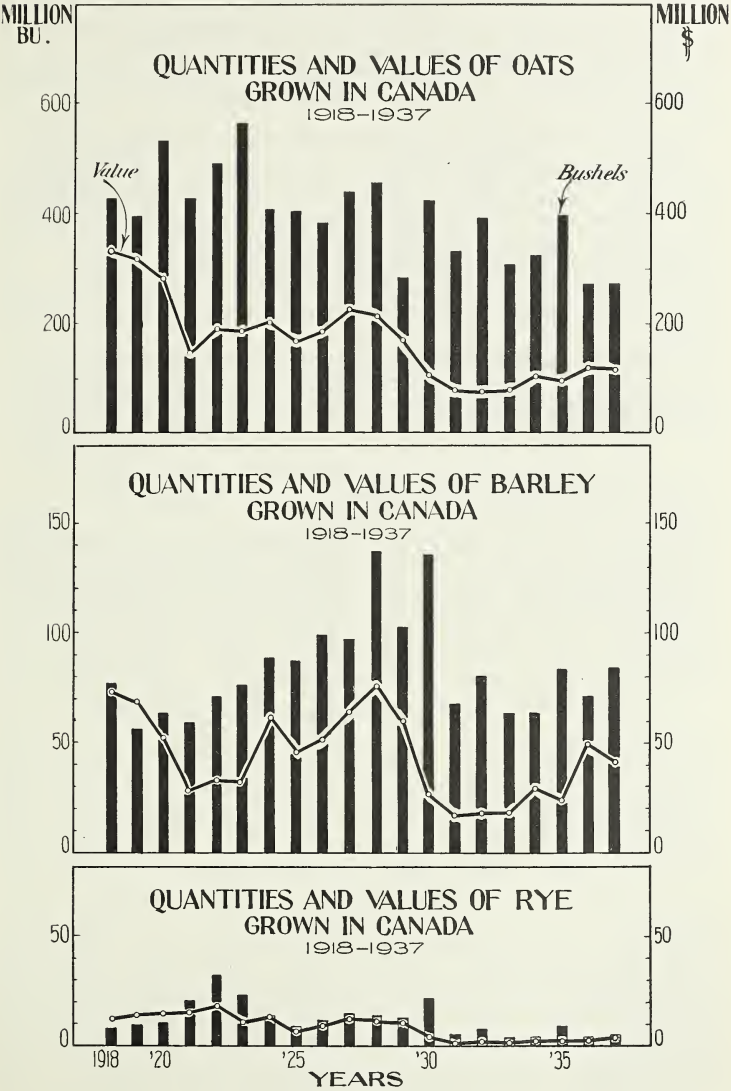
AGRICULTURAL PRODUCTION
1918-1937





AGRICULTURAL PRODUCTION

1918-1937



Presentation of Agricultural Statistics.—In the current edition of the Year Book, statistics of agriculture are presented under the following headings: (1) value of agricultural production and of farm capital; (2) acreages, yields, and values of principal field crops; (3) farm live stock and poultry; (4) dairying; (5) horticulture; (6) special agricultural crops; (7) farm labour and wages; (8) prices of agricultural produce; (9) agricultural statistics of the census; (10) miscellaneous agricultural statistics; and (11) international agricultural statistics.

Subsection 1.—Value of Agricultural Production and of Farm Capital.

Value of Agricultural Production.—Table 1 shows, under principal headings, the gross agricultural revenue of Canada, by provinces, for the years 1933 to 1937. It is important to note that the figures represent gross values, as no distinction is made between crops used as materials for other kinds of production, such as the feeding of live stock, and no allowance is made for the costs of production. The total revenue for 1937 shows a decrease of $27,873,000 or 2·6 p.c. as compared with 1936, which is accounted for largely by the decreased value of field crops in Saskatchewan.

1.—Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1933-37.

Note.—Preliminary figures for 1938 and revised figures for 1933-37 will be found in the Monthly Bulletin of Agricultural Statistics, March, 1939.

Item.	1933.[1]	1934.[1]	1935.[1]	1936.[1]	1937.[1]
	$'000	$'000	$'000	$'000	$'000
Canada—					
Field crops	453,598	549,080	511,873	612,300	553,823
Farm animals	89,063	99,438	120,078	130,979	140,989
Wool	2,005	1,899	2,232	2,782	2,972
Dairy products	170,829	183,791	193,487	211,422	228,403
Fruits and vegetables	34,588	43,424	49,964	43,845	41,900
Poultry and eggs	38,060	45,515	50,434	53,244	51,766
Fur farming	4,062	4,534	5,516	6,532	7,642
Maple products	2,059	3,040	3,522	3,714	2,245
Tobacco	6,533	7,231	10,763	9,420	17,056
Flax fibre	161	250	321	298	332
Clover and grass seed	1,362	2,010	1,818	2,096	2,298
Honey and wax	2,290	2,625	2,423	2,939	2,272
Totals	**804,610**	**942,837**	**952,431**	**1,079,571**	**1,051,698**
Prince Edward Island—					
Field crops	8,841	9,054	8,561	10,693	7,475
Farm animals	945	917	1,369	1,429	1,452
Wool	42	36	33	45	58
Dairy products	1,505	1,407	1,444	1,653	1,825
Fruits and vegetables	79	136	154	172	190
Poultry and eggs	682	669	825	823	762
Fur farming	623	762	863	933	1,091
Clover and grass seed	13	15	8	15	15
Honey and wax	1	1	2	2	2
Totals	**12,731**	**12,997**	**13,259**	**15,765**	**12,870**
Nova Scotia—					
Field crops	12,151	12,995	11,748	13,593	10,570
Farm animals	1,998	1,924	2,257	2,548	3,079
Wool	89	96	96	112	155
Dairy products	4,990	5,827	5,948	6,578	7,194
Fruits and vegetables	4,385	4,265	5,586	4,492	5,235
Poultry and eggs	965	1,058	1,184	1,216	1,120
Fur farming	304	276	386	466	546
Maple products	27	63	46	25	25
Clover and grass seed	[2]	[2]	4	[2]	[2]
Honey and wax	11	8	9	9	8
Totals	**24,920**	**26,512**	**27,264**	**29,039**	**27,932**

---

[1] Subject to revision. [2] Less than $500.

1.—Estimated Gross Value of Agricultural Production in Canada, Itemized by Provinces, 1933-37—continued.

Item.	1933.[1]	1934.[1]	1935.[1]	1936.[1]	1937.[1]
	$'000	$'000	$'000	$'000	$'000
New Brunswick—					
Field crops	12,044	14,961	14,542	18,396	13,598
Farm animals	2,129	2,478	2,931	3,421	3,688
Wool	77	74	91	116	126
Dairy products	4,307	4,488	4,682	5,062	5,506
Fruits and vegetables	637	908	1,044	1,164	1,291
Poultry and eggs	1,065	1,139	1,291	1,323	1,247
Fur farming	560	764	753	856	1,002
Maple products	44	26	48	46	32
Clover and grass seed	7	14	11	15	12
Honey and wax	10	15	9	9	15
Totals	**20,880**	**24,867**	**25,402**	**30,408**	**26,517**
Quebec—					
Field crops	67,512	98,309	83,616	91,276	81,629
Farm animals	13,868	17,989	21,812	23,626	29,673
Wool	491	527	628	700	705
Dairy products	42,989	46,462	49,119	52,794	58,019
Fruits and vegetables	4,837	7,078	7,380	7,933	8,664
Poultry and eggs	6,271	7,221	7,664	8,215	8,428
Fur farming	895	975	1,165	1,258	1,472
Maple products	1,268	1,911	2,267	2,482	1,308
Tobacco	270	832	642	845	980
Flax fibre	[2]	100	160	143	199
Clover and grass seed	70	315	207	140	60
Honey and wax	421	376	414	558	373
Totals	**138,892**	**182,095**	**175,074**	**189,970**	**191,510**
Ontario—					
Field crops	135,813	143,734	132,086	166,284	150,367
Farm animals	31,500	34,089	43,344	46,732	50,885
Wool	553	479	575	735	821
Dairy products	74,117	80,018	85,132	92,516	99,632
Fruits and vegetables	12,553	16,608	18,697	17,832	13,652
Poultry and eggs	16,294	19,464	20,915	22,939	21,659
Fur farming	721	704	966	1,131	1,323
Maple products	720	1,040	1,161	1,161	880
Tobacco	6,206	6,337	10,117	8,549	16,000
Flax fibre	161	150	161	155	133
Clover and grass seed	1,079	857	1,006	1,367	1,173
Honey and wax	1,097	1,253	1,096	928	676
Totals	**280,814**	**304,733**	**315,256**	**360,329**	**357,201**
Manitoba—					
Field crops	35,653	49,761	34,944	50,401	90,930
Farm animals	6,308	6,568	7,301	9,058	9,797
Wool	89	82	95	140	122
Dairy products	10,796	9,848	10,599	11,701	13,362
Fruits and vegetables	1,612	1,295	1,894	1,313	1,662
Poultry and eggs	2,866	2,946	3,538	3,626	3,643
Fur farming	274	272	402	561	656
Clover and grass seed	45	70	131	110	457
Honey and wax	353	476	464	749	624
Totals	**57,996**	**71,318**	**59,368**	**77,659**	**121,253**
Saskatchewan—					
Field crops	82,708	96,473	119,644	141,793	52,188
Farm animals	12,711	13,777	16,303	18,290	15,691
Wool	206	180	240	220	238
Dairy products	12,088	13,102	14,012	16,492	16,282
Fruits and vegetables	1,371	2,362	3,301	1,318	322
Poultry and eggs	4,317	5,879	7,178	6,552	6,319
Fur farming	166	207	255	344	402
Clover and grass seed	54	102	220	222	329
Honey and wax	105	80	120	301	131
Totals	**113,726**	**132,162**	**161,273**	**185,532**	**91,902**

---

[1] Subject to revision. [2] Less than $500.

1.—Estimated Gross Value of Agricultural Production of Canada, Itemized by Provinces, 1933-37—concluded.

Item.	1933.[1]	1934.[1]	1935.[1]	1936.[1]	1937.[1]
	$'000	$'000	$'000	$'000	$'000
Alberta—					
Field crops	86,499	111,044	93,687	103,603	130,474
Farm animals	16,939	18,645	21,382	22,067	22,585
Wool	359	330	348	566	592
Dairy products	12,986	14,407	14,805	16,309	17,117
Fruits and vegetables	1,203	1,996	2,942	1,202	1,207
Poultry and eggs	2,999	3,893	4,459	4,138	4,229
Fur farming	422	453	588	770	901
Clover and grass seed	55	486	145	134	158
Honey and wax	114	186	125	211	225
Totals	**121,576**	**151,440**	**138,481**	**149,000**	**177,488**
British Columbia—					
Field crops	12,377	12,749	13,045	16,261	16,592
Farm animals	2,665	3,051	3,379	3,808	4,139
Wool	99	95	126	148	155
Dairy products	7,051	8,232	7,746	8,317	9,466
Fruits and vegetables	7,911	8,776	8,966	8,419	9,677
Poultry and eggs	2,601	3,246	3,380	4,412	4,359
Fur farming	97	121	138	213	249
Tobacco	57	62	4	26	76
Clover and grass seed	39	151	86	93	94
Honey and wax	178	230	184	172	218
Totals	**33,075**	**36,713**	**37,054**	**41,869**	**45,025**

[1] Subject to revision.

Value of Farm Capital.—Table 2 shows approximately, by provinces, the current value of farm capital in the Dominion in 1936 and 1937.

2.—Current Value of Farm Capital in Canada, by Provinces, 1936 and 1937.

Province.	1936.				1937.			
	Lands and Buildings.	Implements and Machinery.	Live Stock.[1]	Total.[1]	Lands and Buildings.	Implements and Machinery.	Live Stock.	Total.
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
P. E. Island	39,162	6,326	7,674	53,162	42,920	6,142	8,285	57,347
Nova Scotia	99,623	8,229	13,372	121,224	91,084	7,990	15,453	114,527
New Brunswick	83,008	10,331	15,188	108,527	77,061	10,030	16,363	103,454
Quebec	649,820	76,167	100,899	826,886	684,131	73,489	117,025	874,645
Ontario	1,026,126	120,563	194,942	1,341,631	1,072,847	118,501	200,677	1,392,025
Manitoba	224,848[2]	40,137[2]	45,314	310,299	238,901[2]	39,967[2]	52,436	331,304
Saskatchewan	797,795[2]	131,994[2]	97,274	1,027,063	797,795[2]	125,382[2]	91,579	1,014,756
Alberta	517,003[2]	89,751[2]	82,138	688,892	517,003[2]	86,284[2]	85,072	688,359
British Columbia	117,089	10,699	20,689	148,477	113,239	10,669	22,258	146,166
Totals	**3,554,474**	**494,197**	**577,490**	**4,626,161**	**3,634,981**	**478,454**	**609,148**	**4,722,583**

[1] Revised since the publication of the 1938 Year Book. [2] Based on returns from the 1936 Quinquennial Census.

The items included in the term "farm capital" as used in Table 2, are lands and buildings; implements and machinery, including motor trucks and automobiles; and live stock, including poultry and animals on fur farms. The 1931 values of lands, buildings, implements, and machinery were reported by the decennial census taken at June 1, in that year. Changes in the total value of lands and buildings for the years 1932 to 1937 have been based on the value of occupied farm lands reported annually by crop correspondents, while those in the annual values of farm implements and machinery have been estimated on the basis of sales reported each year: in the case of the Prairie Provinces, data are based on the Quinquennial Census of 1936.

The preliminary estimate of the current value of farm capital in Canada for 1937 is $4,722,583,000 as compared with the revised estimates of $4,626,161,000 for 1936; $4,712,391,000 for 1935; $4,464,147,000 for 1934; $4,443,159,000 for 1933; and $4,515,944,000 for 1932.

Subsection 2.—Acreages, Yields, and Values of Field Crops.

The Chief Field Crops of the Latest Ten Years.—In Table 3 will be found a summary statement of the acreages, yields, and values of wheat, oats, barley, rye, buckwheat, flaxseed, potatoes, hay and clover, and alfalfa for the latest ten years.

A rapid increase in the acreage of field crops was a characteristic of the pre-war and the war periods, when settlement of the western plains occurred. During the latest ten years acreages have been relatively stable for wheat and oats. Fluctuations in the areas devoted to barley, rye, and flax have been quite marked as changes in the prices of these crops encouraged or discouraged production. Hay and clover acreage has shown a tendency to decline, but an upward trend in alfalfa acreage has occurred, due to the development of seed-producing areas in Western Canada. Successive droughts in the West have considerably reduced production of the principal grain crops from 1933 to 1937, and thus the data given in the table do not reflect the average productive capacity of the areas sown to each crop.

3.—Acreages, Yields, and Values of Principal Crops Grown in Canada, 1929-38.

Note.—Comparative figures for the years 1908-28 are given in the Canada Year Book, 1929, pp. 230-232. The total value for wheat for 1912 should be $139,090,000 instead of $19,090,000. For certain figures for earlier years on acreage, yield, and value see Statistical Summary of the Progress of Canada at the beginning of this volume.

Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.	Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	'000 acres.	bu.	'000 bu.	$ per bu.	$'000		'000 acres.	bu.	'000 bu.	$ per bu.	$'000
Wheat—						Barley—					
1929......	25,255	12·1	304,520	1·05	319,715	1929......	5,926	17·3	102,313	0·59	60,505
1930......	24,898	16·9	420,672	0·49	204,693	1930......	5,559	24·3	135,160	0·20	27,254
1931......	26,355	12·2	321,325	0·38	123,550	1931......	3,791	17·8	67,383	0·26	17,465
1932......	27,182	16·3	443,061	0·35	154,760	1932......	3,758	21·5	80,773	0·23	18,855
1933......	25,991	10·8	281,892	0·49	136,958	1933......	3,658	17·3	63,359	0·30	18,954
1934.....	23,985	11·5	275,849	0·61	169,631	1934......	3,613	17·6	63,742	0·47	29,975
1935.......	24,116	11·7	281,935	0·61	173,065	1935......	3,887	21·6	83,975	0·29	24,465
1936......	25,605	8·6	219,218	0·94	205,327	1936......	4,438	16·2	71,922	0·69	49,512
1937......	25,570	7·0[1]	180,210[1]	1·02[1]	184,651[1]	1937......	4,331	19·2	83,124	0·51	42,020[1]
1938......	25,931	13·5	350,010	0·59	205,351	1938......	4,454	23·0	102,242	0·28	28,383
Oats—						Rye—					
1929......	12,479	22·7	282,838	0·59	168,017	1929......	992	13·3	13,161	0·84	11,095
1930......	13,259	31·9	423,148	0·24	102,919	1930......	1,448	15·2	22,019	0·20	4,402
1931......	12,838	25·6	328,278	0·24	77,970	1931......	799	6·7	5,322	0·28	1,476
1932......	13.148	29·8	391,561	0·19	75,988	1932......	774	10·9	8,470	0·27	2,284
1933......	13,529	22·7	307,478	0·26	79,818	1933......	583	7·2	4,177	0·38	1,603
1934......	13,731	23·4	321,120	0·32	103,124	1934......	685	6·9	4,706	0·49	2,325
1935......	14,096	28·0	394,348	0·24	93,409	1935......	720	13·4	9,606	0·27	2,634
1936......	13,288	20·5	271,778	0·43	116,267	1936......	625	6·8	4,281	0·70	2,980
1937......	13,049	20·6	268,442	0·43	114,093[1]	1937......	894	6·5	5,771	0·72[1]	4,152[1]
1938......	13,010	28·5	371,382	0·24	89,600	1938......	741	14·8	10,988	0·28	3,094

---

[1] Revised since the publication of the 1938 Year Book.

3.—Acreages, Yields, and Values of Principal Crops Grown in Canada, 1929-38—concl.

Crop and Year.	Area.	Yield per Acre.	Total Yield.	Average Price.	Total Value.
	'000 acres.	bu.	'000 bu.	$ per bu.	$'000
Buckwheat—					
1929	516	20·3	10,470	0·94	9,867
1930	490	22·2	10,903	0·65	7,124
1931	336	20·6	6,917	0·50	3,454
1932	368	22·9	8,424	0·43	3,585
1933	398	21·3	8,483	0·50	4,233
1934	407	21·2	8,635	0·53	4,572
1935	380	20·9	7,949	0·51	4,017
1936	397	21·7	8,596	0·71	6,088
1937	396	19·6	7,745	0·72[1]	5,592[1]
1938	376	18·8	7,079	0·59	4,171
Flaxseed—					
1929	382	5·4	2,060	2·38	4,898
1930	582	8·7	5,069	0·94	4,741
1931	648	3·8	2,465	0·79	1,944
1932	462	5·9	2,719	0·62	1,682
1933	244	2·6	632	1·20	756
1934	227	4·0	910	1·15	1,049
1935	307	5·4	1,667	1·19	1,991
1936	477	3·8	1,795	1·44	2,588
1937	241	3·2[1]	775[1]	1·48[1]	1,148[1]
1938	221	6·3	1,389	1·14	1,581
		cwt.	'000 cwt.	per cwt.	
Potatoes—					
1929	544	73·4	39,930	1·59	63,372
1930	571	84·4	48,241	0·83	39,858
1931	592	88·0	52,305	0·43	22,359
1932	522	76·0	39,416	0·63	24,920
1933	528	81·0	42,745	0·77	33,092
	'000 acres.	cwt.	'000 cwt.	$ per cwt.	$'000
Potatoes—concl.					
1934	569	84·0	48,095	0·50	23,822
1935	507	76·0	38,670	0·80	30,854
1936	502	79·0	39,614	1·14	45,125
1937	531	80·0	42,547	0·63[1]	26,650[1]
1938	522	69·0	35,938	0·75	27,079
Hay and Clover—		tons.	'000 tons.	per ton.	
1929	10,560	1·50	15,833	11·65	184,528
1930	10,618	1·54	16,397	9·83	161,122
1931	9,114	1·60	14,540	7·57	110,110
1932	8,812	1·54	13,559	7·13	96,654
1933	8,876	1·29	11,443	8·77	100,306
1934	8,881	1·26	11,174	11·75	131,295
1935	8,698	1·62	14,060	7·62	107,133
1936	8,784	1·57	13,803	7·66	105,703
1937	8,693	1·50	13,030	7·53[1]	98,136[1]
1938	8,820	1·56	13,798	6·96	95,993
Alfalfa—					
1929	799	2·30	1,835	12·63	23,183
1930	744	2·20	1,640	12·12	19,877
1931	568	2·45	1,388	10·36	14,381
1932	666	2·65	1,764	8·58	15,131
1933	722	2·29	1,652	9·25	15,279
1934	679	1·96	1,328	12·67	16,822
1935	762	2·57	1,959	8·04	15,743
1936	854	2·30	1,966	9·19	18,077
1937	849	2·48	2,107	8·06[1]	16,986[1]
1938	859	2·40	2,061	7·78	16,036

[1] Revised since the publication of the 1938 Year Book.

Total Acreages and Values, 1933-38.—Table **4** shows for Canada and the provinces, for the latest six years, the total estimated areas and values of field crops, and Table **5** the areas, yields, and values of the principal field crops in Canada, by provinces, for the years 1937 and 1938.

4.—Total Acreages and Values of Field Crops in Canada, by Provinces, 1933-38.

NOTE.—For earlier figures, see Statistical Summary at the beginning of this volume.

Province.	1933.	1934.	1935.	1936.	1937.	1938.
	acres.	acres.	acres.	acres.	acres.	acres.
Acreages—						
P. E. Island	476,850	473,000	472,900	483,200	490,300	484,400
Nova Scotia	542,100	554,800	558,700	551,400	548,100	549,200
New Brunswick	908,400	906,300	913,900	921,300	907,300	903,600
Quebec	5,784,700	5,950,300	5,912,800	6,018,400	6,042,300	6,103,300
Ontario	9,195,300	8,999,900	9,104,800	9,118,900	9,037,000	9,077,300
Manitoba	5,963,900	6,000,900	5,962,000	6,081,100	6,421,600	6,897,500
Saskatchewan	21,306,000	19,771,820	20,176,210	21,757,350	20,483,600	19,960,300
Alberta	13,909,400	12,878,900	13,451,450	12,743,150	13,409,000[1]	13,593,500
British Columbia	446,800	454,400	463,700	472,050	487,700	501,400
Totals, Acreages	**58,533,450**	**55,990,320**	**57,016,460**	**58,146,850**	**57,826,900**[1]	**58,070,500**
Values—	$	$	$	$	$	$
P. E. Island	8,841,000	9,054,000	8,561,000	10,693,000	7,706,000[1]	8,018,000[2]
Nova Scotia	12,151,000	12,995,000	11,748,000	13,593,000	10,811,000[1]	9,658,000[2]
New Brunswick	12,044,000	14,961,000	14,542,000	18,396,000	14,149,000[1]	14,912,000[2]
Quebec	67,512,000	98,309,000	83,616,000	91,276,000	81,629,000[1]	81,023,000[2]
Ontario	135,813,000	143,734,000	132,086,000	166,284,000	149,100,000[1]	127,810,000[2]
Manitoba	35,653,000	49,761,000	34,944,000	50,401,000	90,112,000[1]	54,649,000[2]
Saskatchewan	82,708,000	96,472,600	119,643,600[1]	141,793,400	51,850,000[1]	100,759,000[2]
Alberta	86,499,000	111,044,000	93,687,000	103,603,000	134,429,000[1]	118,303,000[2]
British Columbia	12,377,000	12,749,000	13,045,300	16,261,000	16,436,000[1]	13,728,000[2]
Totals, Values	**453,598,000**	**549,079,600**	**511,872,900**[1]	**612,300,400**	**556,222,000**[1]	**528,860,000**[2]

[1] Revised since the publication of the 1938 Year Book.

[2] Final figures: figure for value of field crops given in Table 1 is preliminary.

5.—Acreages, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938.

NOTE.—The figures for 1937 differ, in many cases, from those appearing in the 1938 Year Book owing to revisions in the estimates. Those for 1938 are subject to revision. Comparable figures for earlier years will be found in the corresponding table of earlier editions of the Year Book.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production	Average Farm Price.	Gross Farm Value.
		acres.	bu.	bu.	$ per bu.	$
Canada—						
Fall wheat	1937	718,800	26·0	18,689,000	0·98	18,315,000
	1938	742,100	26·7	19,814,000	0·58	11,492,000
Spring wheat	1937	24,851,400	6·5	161,521,000	1·03	166,336,000
	1938	25,188,400	13·1	330,196,000	0·59	193,859,000
All wheat	1937	25,570,200	7·0	180,210,000	1·02	184,651,000
	1938	25,930,500	13·5	350,010,000	0·59	205,351,000
Oats	1937	13,048,500	20·6	268,442,000	0·43	114,093,000
	1938	13,009,700	28·5	371,382,000	0·24	89,600,000
Barley	1937	4,331,400	19·2	83,124,000	0·51	42,020,000
	1938	4,453,900	23·0	102,242,000	0·28	28,383,000
Fall rye	1937	700,300	6·5	4,579,000	0·72	3,307,000
	1938	553,500	15·1	8,363,000	0·28	2,347,000
Spring rye	1937	193,400	6·2	1,192,000	0·71	845,000
	1938	187,900	14·0	2,625,000	0·28	747,000
All rye	1937	893,700	6·5	5,771,000	0·72	4,152,000
	1938	741,400	14·8	10,988,000	0·28	3,094,000
Peas	1937	84,000	14·3	1,199,600	1·68	2,012,000
	1938	80,200	17·0	1,365,000	1·55	2,113,000
Beans	1937	67,600	19·2	1,295,500	1·23	1,597,000
	1938	70,600	22·1	1,557,000	1·11	1,725,000
Buckwheat	1937	395,500	19·6	7,745,000	0·72	5,592,000
	1938	375,600	18·8	7,079,000	0·59	4,171,000
Mixed grains	1937	1,128,200	32·0	36,129,000	0·51	18,329,000
	1938	1,159,500	33·8	39,161,000	0·39	15,126,000
Flaxseed	1937	241,300	3·2	774,600	1·48	1,148,000
	1938	221,200	6·3	1,389,000	1·14	1,581,000
Corn for husking	1937	165,600	32·7	5,415,000	0·64	3,466,000
	1938	180,100	42·7	7,690,000	0·47	3,614,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	531,200	80·0	42,547,000	0·63	26,650,000
	1938	521,900	69·0	35,938,000	0·75	27,079,000
Turnips, etc	1937	185,700	195·0	36,300,000	0·32	11,777,000
	1938	189,500	201·0	38,160,000	0·32	12,133,000
			tons.	tons.	per ton.	
Hay and clover	1937	8,693,300	1·50	13,030,000	7·53	98,136,000
	1938	8,819,800	1·56	13,798,000	6·96	95,993,000
Alfalfa	1937	848,900	2·48	2,107,000	8·06	16,986,000
	1938	859,000	2·40	2,061,000	7·78	16,036,000
Fodder corn	1937	447,300	8·78	3,927,500	3·08	12,087,000
	1938	460,200	9·59	4,412,800	2·81	12,422,000
Grain hay	1937	1,147,800	1·54	1,768,000	6·23	11,021,000
	1938	949,500	1·76	1,674,000	4·37	7,315,000
Sugar beets	1937	46,700	8·95	418,000	5·99	2,505,000
	1938	47,900	11·00	527,000	5·93	3,124,000

5.—Acreages, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	bu.	bu.	$ per bu.	$
Prince Edward Island—						
Spring wheat	1937	18,600	12·8	238,000	1·31	312,000
	1938	18,900	9·5	180,000	0·96	173,000
Oats	1937	153,300	22·4	3,437,000	0·53	1,822,000
	1938	146,800	33·0	4,844,000	0·33	1,599,000
Barley	1937	6,500	21·4	139,000	0·85	118,000
	1938	7,800	25·0	195,000	0·60	117,000
Buckwheat	1937	3,700	15·4	57,000	0·75	43,000
	1938	3,300	20·0	66,000	0·65	43,000
Mixed grains	1937	29,300	28·4	832,000	0·60	499,000
	1938	32,700	33·0	1,079,000	0·45	486,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	35,800	97·0	3,471,000	0·39	1,354,000
	1938	34,300	112·0	3,842,000	0·68	2,613,000
Turnips, etc	1937	11,600	180·0	2,088,000	0·30	626,000
	1938	11,400	250·0	2,850,000	0·20	570,000
			tons.	tons.	per ton.	
Hay and clover	1937	231,100	1·66	383,000	7·62	2,918,000
	1938	228,800	1·30	297,000	8·06	2,394,000
Fodder corn	1937	400	6·75	2,700	5·00	14,000
	1938	400	9·44	3,800	6·00	23,000
			bu.	bu.	per bu.	
Nova Scotia—						
Spring wheat	1937	4,000	12·8	51,000	1·38	70,000
	1938	3,400	16·0	54,000	1·00	54,000
Oats	1937	87,400	24·9	2,174,000	0·66	1,435,000
	1938	90,400	29·5	2,667,000	0·45	1,200,000
Barley	1937	9,600	20·3	195,000	0·89	174,000
	1938	9,700	25·0	243,000	0·70	170,000
Buckwheat	1937	5,200	17·3	90,000	0·93	84,000
	1938	4,300	20·0	86,000	0·80	69,000
Mixed grains	1937	6,400	25·5	163,000	0·78	127,000
	1938	6,300	30·0	189,000	0·62	117,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	22,000	86·0	1,885,000	0·85	1,602,000
	1938	21,200	72·0	1,526,000	1·00	1,526,000
Turnips, etc	1937	11,700	249·0	2,912,000	0·40	1,165,000
	1938	11,900	272·0	3,237,000	0·40	1,295,000
			tons.	tons.	per ton.	
Hay and clover	1937	401,000	1·91	766,000	8·00	6,128,000
	1938	401,300	1·73	694,000	7·50	5,205,000
Fodder corn	1937	800	8·00	6,400	4·00	26,000
	1938	700	8·00	5,600	4·00	22,000

5.—Acreages, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	bu.	bu.	$ per bu.	$
New Brunswick—						
Spring wheat	1937	13,000	14·2	184,000	1·40	258,000
	1938	12,500	12·0	150.000	1·05	158,000
Oats	1937	210,400	24·4	5,144,000	0·60	3,086,000
	1938	211,400	29·5	6,236,000	0·45	2,806,000
Barley	1937	13,400	20·0	268,000	0·80	214,000
	1938	14,700	26·0	382,000	0·65	248,000
Beans	1937	1,100	19·0	21,000	2·50	53,000
	1938	1,100	18·0	20,000	2·10	42,000
Buckwheat	1937	32,500	17·8	579,000	0·84	486,000
	1938	31,300	19·0	595,000	0·75	446,000
Mixed grains	1937	3,900	25·1	98,000	0·70	69,000
	1938	3,700	28·0	104,000	0·53	55,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	50,200	115·0	5,773,000	0·56	3,233,000
	1938	50,900	80·0	4,072,000	0·90	3,665,000
Turnips, etc	1937	11,500	240·0	2,760,000	0·40	1,104,000
	1938	12,200	210·0	2,562,000	0·44	1,127,000
			tons	tons.	per ton.	
Hay and clover	1937	570,500	1·41	802,000	7·00	5,614,000
	1938	564,900	1·60	904,000	7·00	6,328,000
Fodder corn	1937	800	9·21	7,400	4·38	32,000
	1938	900	9·34	8,400	4·38	37,000
Quebec—			bu.	bu.	per bu.	
Spring wheat	1937	53,000	16·6	879,000	1·24	1,094,000
	1938	50,500	15·0	758,000	0·98	743,000
Oats	1937	1,644,500	21·8	35,850,000	0·61	22,023,000
	1938	1,662,000	23·2	38,492,000	0·54	20,784,000
Barley	1937	168,500	21·3	3,589,000	0·80	2,875,000
	1938	177,000	23·5	4,164,000	0·67	2,802,000
Spring rye	1937	6,700	16·0	107,000	0·95	102,000
	1938	7,000	15·9	111,000	0·85	94,000
Peas	1937	20,400	13·2	270,000	2·07	559,000
	1938	20,100	14·7	296,000	1·91	566,000
Beans	1937	7,500	17·6	132,000	2·11	279,000
	1938	7,900	17·0	134,000	1·87	251,000
Buckwheat	1937	153,100	20·7	3,168,000	0·82	2,583,000
	1938	145,400	18·6	2,710,000	0·77	2,094,000
Mixed grains	1937	133,800	23·6	3,159,000	0·74	2,350,000
	1938	142,700	24·3	3,472,000	0·66	2,293,000
Flaxseed	1937	2,800	9·3	26,000	1·96	51,000
	1938	3,000	9·0	27,000	2·15	58,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	143,200	87·0	12,458,000	0·64	8,032,000
	1938	139,900	71·2	9,957,000	0·83	8,308,000
Turnips, etc	1937	37,600	166·0	6,226,000	0·44	2,733,000
	1938	37,600	175·0	6,582,000	0·45	2,958,000

5.—Acreages, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	tons.	tons.	$ per ton.	$
Quebec—concluded.						
Hay and clover	1937	3,608,600	1·33	4,799,000	7·66	36,756,000
	1938	3,640,000	1·44	5,238,000	7·20	37,715,000
Alfalfa	1937	15,300	2·20	34,000	9·03	307,000
	1938	16,400	2·62	43,000	8·44	363,000
Fodder corn	1937	47,300	9·87	467,000	4·04	1,885,000
	1938	53,800	9·78	526,000	3·79	1,994,000
			bu.	bu.	per bu.	
Ontario—						
Fall wheat	1937	718,800	26·0	18,689,000	0·98	18,315,000
	1938	742,100	26·7	19,814,000	0·58	11,492,000
Spring wheat	1937	94,200	17·0	1,601,000	0·97	1,553,000
	1938	88,000	18·3	1,610,000	0·60	966,000
All wheat	1937	813,000	25·0	20,290,000	0·98	19,868,000
	1938	830,100	25·8	21,424,000	0·58	12,458,000
Oats	1937	2,263,900	32·6	73,803,000	0·42	30,997,000
	1938	2,263,000	36·3	82,147,000	0·29	23,823,000
Barley	1937	555,900	28·8	16,010,000	0·59	9,446,000
	1938	544,000	30·6	16,646,000	0·41	6,825,000
Fall rye	1937	74,700	17·3	1,292,000	0·78	1,008,000
	1938	74,100	19·4	1,438,000	0·44	633,000
Peas	1937	55,900	13·6	760,000	1·56	1,186,000
	1938	52,400	17·3	907,000	1·50	1,361,000
Beans	1937	57,200	19·3	1,104,000	1·07	1,181,000
	1938	59,700	22·9	1,367,000	1·00	1,367,000
Buckwheat	1937	195,200	19·2	3,748,000	0·62	2,324,000
	1938	183,200	19·1	3,499,000	0·42	1,470,000
Mixed grains	1937	890,100	34·5	30,708,000	0·48	14,740,000
	1938	888,300	36·7	32,601,000	0·36	11,736,000
Flaxseed	1937	5,000	10·3	52,000	1·40	73,000
	1938	5,200	8·5	44,000	1·34	59,000
Corn for husking	1937	165,600	32·7	5,415,000	0·64	3,466,000
	1938	180,100	42·7	7,690,000	0·47	3,614,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	150,600	67·0	10,090,000	0·57	5,751,000
	1938	146,200	51·0	7,456,000	0·78	5,816,000
Turnips, etc	1937	97,200	205·0	19,926,000	0·24	4,782,000
	1938	99,000	210·0	20,790,000	0·24	4,990,000
			tons.	tons.	per ton.	
Hay and clover	1937	2,722,200	1·69	4,601,000	7·14	32,851,000
	1938	2,769,000	1·73	4,796,000	6·69	32,085,000
Alfalfa	1937	646,700	2·57	1,662,000	7·31	12,149,000
	1938	633,000	2·41	1,526,000	7·25	11,064,000
Fodder corn	1937	317,300	9·71	3,081,000	2·69	8,288,000
	1938	321,800	10·79	3,472,000	2·51	8,715,000
Sugar beets	1937	26,500	6·98	185,000	5·35	990,000
	1938	28,200	9·80	276,000	6·50	1,794,000

5.—Acreage, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	bu.	bu.	$ per bu.	$
Manitoba—						
Spring wheat	1937	2,872,000	15·7	45,100,000	1·02	46,002,000
	1938	3,184,000	16·0	51,000,000	0·61	31,110,000
Oats	1937	1,410,000	30·5	43,075,000	0·38	16,369,000
	1938	1,462,000	28·0	41,000,000	0·19	7,790,000
Barley	1937	1,393,000	25·0	34,800,000	0·47	16,356,000
	1938	1,355,000	22·9	31,000,000	0·25	7,750,000
Fall rye	1937	116,600	19·0	2,220,000	0·72	1,598,000
	1938	176,400	15·9	2,800,000	0·25	700,000
Spring rye	1937	18,600	12·9	240,000	0·72	173,000
	1938	28,600	15·4	440,000	0·25	110,000
All rye	1937	135,200	18·2	2,460,000	0·72	1,771,000
	1938	205,000	15·8	3,240,000	0·25	810,000
Peas	1937	2,600	17·1	44,000	1·50	66,000
	1938	3,000	16·6	50,000	0·95	48,000
Buckwheat	1937	5,800	17·8	103,000	0·70	72,000
	1938	8,100	15·2	123,000	0·40	49,000
Mixed grains	1937	23,800	26·3	626,000	0·44	275,000
	1938	29,700	21·0	625,000	0·25	156,000
Flaxseed	1937	38,300	9·7	370,000	1·49	551,000
	1938	42,700	8·0	340,000	1·12	381,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	30,900	80·0	2,481,000	0·56	1,389,000
	1938	31,900	60·0	1,914,000	0·50	957,000
Turnips, etc	1937	5,500	131·0	723,000	0·49	354,000
	1938	6,200	76·0	471,000	0·43	203,000
			tons.	tons.	per ton.	
Hay and clover	1937	410,000	1·92	788,000	6·32	4,980,000
	1938	465,000	1·65	767,000	4·82	3,697,000
Alfalfa	1937	30,000	2·37	71,000	7·77	552,000
	1938	45,000	2·24	101,000	6·83	690,000
Fodder corn	1937	64,500	4·26	275,000	5·00	1,375,000
	1938	59,900	4·67	280,000	3·60	1,008,000
			bu.	bu.	per bu.	
Saskatchewan—						
Spring wheat	1937	13,893,000	2·6	36,000,000	1·05	37,800,000
	1938	13,973,000	9·6	132,000,000	0·58	76,560,000
Oats	1937	4,380,000	5·1	22,338,000	0·38	8,488,000
	1938	4,171,000	21·6	90,000,000	0·16	14,400,000
Barley	1937	1,174,000	4·7	5,518,000	0·46	2,538,000
	1938	1,207,000	16·6	20,000,000	0·22	4,400,000
Fall rye	1937	429,000	0·9	386,000	0·67	259,000
	1938	204,000	11·8	2,400,000	0·25	600,000
Spring rye	1937	89,000	2·8	249,000	0·67	167,000
	1938	88,000	11·4	1,000,000	0·25	250,000

5.—Acreage, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938—continued.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	bu.	bu.	$ per bu.	$
Saskatchewan—concluded.						
All rye	1937	518,000	1·2	635,000	0·67	426,000
	1938	292,000	11·6	3,400,000	0·25	850,000
Peas	1937	400	3·9	1,600	1·50	2,000
	1938	500	7·5	4,000	1·50	6,000
Beans	1937	200	2·5	500	2·00	1,000
	1938	300	8·6	3,000	2·00	6,000
Mixed grains	1937	18,800	3·8	71,000	0·50	36,000
	1938	32,200	13·8	444,000	0·21	93,000
Flaxseed	1937	175,000	1·1	200,000	1·42	284,000
	1938	139,000	5·2	725,000	1·11	805,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	48,600	27·0	1,312,000	0·78	1,023,000
	1938	50,600	65·0	3,289,000	0·44	1,447,000
Turnips, etc	1937	2,400	18·0	43,000	0·72	31,000
	1938	2,500	81·0	203,000	0·40	81,000
			tons.	tons.	per ton.	
Hay and clover	1937	242,400	0·53	128,000	7·50	960,000
	1938	230,500	1·24	286,000	5·50	1,573,000
Alfalfa	1937	23,000	1·03	24,000	9·50	228,000
	1938	28,300	1·48	42,000	8·00	336,000
Fodder corn	1937	7,800	0·62	5,000	6·50	33,000
	1938	13,400	2·69	36,000	5·60	202,000
			bu.	bu.	per bu.	
Alberta—						
Spring wheat	1937	7,834,000	9·7	75,700,000	1·02	77,214,000
	1938	7,969,000	17·9	143,000,000	0·58	82,940,000
Oats	1937	2,789,000	27·6	77,000,000	0·35	26,950,000
	1938	2,885,000	35·0	101,000,000	0·15	15,150,000
Barley	1937	995,300	22·2	22,100,000	0·45	9,945,000
	1938	1,125,000	26·0	29,200,000	0·20	5,840,000
Fall rye	1937	80,000	8·5	681,000	0·65	442,000
	1938	99,000	17·4	1,725,000	0·24	414,000
Spring rye	1937	75,000	6·7	504,000	0·65	328,000
	1938	59,000	16·5	975,000	0·24	234,000
All rye	1937	155,000	7·6	1,185,000	0·65	770,000
	1938	158,000	17·1	2,700,000	0·24	648,000
Peas	1937	700	20·3	14,000	1·65	23,000
	1938	800	27·5	22,000	1·30	29,000
Beans	1937	900	19·0	17,000	2·40	41,000
	1938	700	16·7	12,000	1·90	23,000
Mixed grains	1937	18,000	17·3	311,000	0·45	140,000
	1938	19,100	25·1	480,000	0·22	106,000
Flaxseed	1937	20,000	6·2	124,000	1·50	186,000
	1938	31,000	8·1	250,000	1·10	275,000

5.—Acreage, Production, and Values of Principal Field Crops of Canada, Itemized by Provinces, 1937 and 1938—concluded.

Province and Field Crop.	Year.	Area.	Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	cwt.	cwt.	$ per cwt.	$
Alberta—concluded.						
Potatoes	1937	31,000	90·0	2,790,000	0·75	2,093,000
	1938	28,200	74·0	2,087,000	0·37	772,000
Turnips, etc	1937	2,700	116·0	313,000	0·63	197,000
	1938	2,700	107·0	289,000	0·50	145,000
			tons.	tons.	per ton.	
Hay and clover	1937	356,500	1·23	438,000	8·50	3,723,000
	1938	365,600	1·49	545,000	6·00	3,270,000
Alfalfa	1937	83,000	1·88	156,000	10·50	1,638,000
	1938	85,600	2·30	197,000	7·00	1,379,000
Fodder corn	1937	2,700	5·55	15,000	6·25	94,000
	1938	3,100	5·00	16,000	6·00	96,000
Grain hay	1937	1,100,000	1·50	1,650,000	6·00	9,900,000
	1938	900,000	1·75	1,575,000	4·00	6,300,000
Sugar beets	1937	20,200	11·53	233,000	6·50	1,515,000
	1938	19,700	12·74	251,000	5·30	1,330,000
British Columbia—			bu.	bu.	per bu.	
Spring wheat	1937	69,600	25·4	1,768,000	1·15	2,033,000
	1938	69,100	20·9	1,444,000	0·80	1,155,000
Oats	1937	110,000	51·1	5,621,000	0·52	2,923,000
	1938	118,100	42·3	4,996,000	0·41	2,048,000
Barley	1937	15,200	33·2	505,000	0·70	354,000
	1938	13,700	30·1	412,000	0·56	231.000
Spring rye	1937	4,100	22·4	92,000	0·81	75,000
	1938	5,300	18·7	99,000	0·60	59,000
Peas	1937	4,000	27·5	110,000	1·60	176,000
	1938	3,400	25·4	86,000	1·20	103,000
Beans	1937	700	29·3	21,000	2·00	42,000
	1938	900	23·7	21,000	1·70	36,000
Mixed grains	1937	4,100	39·2	161,000	0·58	93,000
	1938	4,800	34·7	167,000	0·50	84,000
Flaxseed	1937	200	13·0	2,600	1·20	3,000
	1938	300	11·0	3,000	1·10	3,000
			cwt.	cwt.	per cwt.	
Potatoes	1937	18,900	121·0	2,287,000	0·95	2,173,000
	1938	18,700	96·0	1,795,000	1·10	1,975,000
Turnips, etc	1937	5,500	238·0	1,309,000	0·60	785,000
	1938	6,000	196·0	1,176,000	0·65	764,000
			tons.	tons.	per ton.	
Hay and clover	1937	151,000	2·15	325,000	12·94	4,206,000
	1938	154,700	1·75	271,000	13·75	3,726,000
Alfalfa	1937	50,900	3·14	160,000	13·20	2,112,000
	1938	50,700	3·00	152,000	14·50	2,204,000
Fodder corn	1937	5,700	11·96	68,000	5·00	340,000
	1938	6,200	10·50	65,000	5·00	325,000
Grain hay	1937	47,800	2·47	118,000	9·50	1,121,000
	1938	49,500	2·00	99,000	10·25	1,015,000

Average Yields per Acre.—Table **6** gives, for the years 1931 to 1938, the average yields per acre of the various field crops, together with the long-time average yields per acre.

6.—Annual Average Yields per Acre of Field Crops for Canada, 1931-38, with Long-Time Averages.

Field Crop.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	Long-Time Average
	bu.	bu.	bu.	bu.	bu.	bu.	bu.	bu.	bu.
Wheat	12·2	16·3	10·8	11·5	11·7[1]	8·6	7·0[1]	13·5	17·1
Oats	25·6	29·8	22·7	23·4	28·0	20·5	20·6	28·5	32·3
Barley	17·8	21·5	17·3	17·6	21·6	16·2	19·2	23·0	25·2
Rye	6·7	10·9	7·2	6·9	13·4	6·8	6·5	14·8	16·1
Peas	16·9	17·9	16·3	16·7	17·1	13·3	14·3	17·0	16·9
Beans	15·3	17·1	15·1	14·3	18·0	13·7	19·2	22·1	16·8
Buckwheat	20·6	22·9	21·3	21·2	20·9	21·7	19·6	18·8	22·4
Mixed grains	33·0	33·0	28·3	32·7	34·3	28·7	32·0	33·8	34·6
Flaxseed	3·8	5·9	2·6	4·0	5·4[1]	3·8	3·2[1]	6·3	8·8
Corn for husking	41·3	38·9	37·0	42·2	46·3	37·0	32·7	42·7	49·3
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Potatoes	88·0	76·0	81·0	84·0	76·0	79·0	80·0	69·0	89·0
Turnips, etc	205·0	216·0	188·0	216·0	190·0	209·0	195·0	201·0	189·0
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
Hay and clover	1·6	1·5	1·3	1·3	1·6	1·6	1·5	1·6	1·5
Fodder corn	8·6	7·8	8·3	7·7	8·5	7·8	8·8	9·6	9·0
Sugar beets	9·1	10·8	9·9	8·3	8·9	10·7	9·0	11·0	9·4
Alfalfa	2·5	2·7	2·3	2·0	2·6	2·3	2·5	2·4	2·4

[1] Revised since the publication of the 1938 Year Book.

Grain Production of the Prairie Provinces.—Estimates of the acreages and production of the grain crops of the Prairie Provinces (Manitoba, Saskatchewan, and Alberta), totalled from Table **5**, are given for 1938 in Table **7**, together with comparative data for 1937 and 1936.

7.—Areas and Production of Wheat, Oats, Barley, Rye, and Flaxseed in the Prairie Provinces, 1936-38.

Kind of Grain.	Areas.			Production.		
	1936.	1937.	1938.	1936.	1937.	1938.
	acres.	acres.	acres.	bu.	bu.	bu.
Wheat	24,837,800	24,599,000	24,946,000	202,000,000	156,800,000[1]	326,000,000
Oats	8,674,300	8,579,000	8,518,000	135,862,000	142,413,000	232,000,000
Barley	3,724,100	3,562,300	3,687,000	52,617,000	62,418,000	80,200,000
Rye	561,800	808,200	655,000	3,201,000	4,280,000	9,340,000
Flaxseed	468,700	233,300	212,700	1,730,000	694,000[1]	1,315,000

[1] Revised since the publication of the 1938 Year Book.

Stocks of Grain in Canada.—Table **8** shows the quantities of grain on farms at July 31, 1938, as compared with July 31, 1937 and 1936. Adding the stocks in elevators, in flour-mills, and in transit, Table **9** shows the total quantities of grain in store at the close of each of the crop years ended July 31, 1936, 1937, and 1938.

8.—Stocks of Grain on Farms in Canada at July 31, 1938, 1937, and 1936, with Totals of Production of the Previous Years' Crops.

Kind of Grain.	Total Production in 1935.	On Farms, July 31, 1936.		Total Production in 1936.	On Farms, July 31, 1937.		Total Production in 1937.	On Farms, July 31, 1938.	
	'000 bu.	p.c.	bu.	'000 bu.	p.c.	bu.	'000 bu.	p.c.	bu.
Wheat	281,935	1·96	5,520,000	219,218	1·82	3,999,300	180,210	2·81	5,061,000
Oats	394,348	7·91	31,186,000	271,778	5·60	15,231,000	268,442	6·01	16,120,000
Barley	83,975	5·00	4,199,200	71,922	2·05	1,476,400	83,124	3·82	3,177,500
Rye	9,606	2·82	270,600	4,281	1·83	78,400	5,771	1·35	78,000
Flaxseed	1,471	0·52	7,600	1,795	0·55	9,800	775	0·23	1,800

9.—Detailed Stocks of Grain in Canada at July 31, 1936, 1937, and 1938.

Item.	1936.	1937.	1938.	1936.	1937.	1938.
	bu.	bu.	bu.	bu.	bu.	bu.
	Wheat.			Oats.		
On farms	5,520,000	3,999,300	5,061,000	31,186,000	15,231,000	16,120,000
Country, private, and mill elevators and mills in Western Division	36,242,730	7,427,392	2,818,530	4,161,502	1,395,430	972,067
Terminal elevators in Western Inspection Division	37,290,332	11,752,253	7,592,197	2,523,253	588,276	1,066,697
Eastern elevators	22,368,381	5,980,927	4,626,499	1,198,655	395,986	533,647
Flour mills (eastern)	1,728,255	968,732	1,034,604	299,981	202,420	442,649
In transit	4,944,579	2,809,387	2,420,398	935,306	452,931	363,593
Totals	**108,094,277**	**32,937,991**	**23,553,228**	**40,304,697**	**18,266,043**	**19,498,653**
	Barley.			Rye.		
On farms	4,199,200	1,476,400	3,177,500	270,600	78,400	78,000
Country, private, and mill elevators and mills in Western Division	2,957,629	970,789	1,104,035	1,077,542	70,768	64,979
Terminal elevators in Western Inspection Division	1,352,626	966,744	1,025,917	1,354,261	99,771	603,840
Eastern elevators	761,969	341,030	860,741	367,111	5,394	226,191
Flour mills (eastern)	24,292	40,674	217,838	14,225	1,878	9,526
In transit	531,915	520,062	244,903	110,630	152,653	3,040
Totals	**9,827,631**	**4,315,699**	**6,630,934**	**3,194,369**	**408,864**	**985,576**
				Flaxseed.		
On farms				7,600	9,800	1,800
Country, private, and mill elevators and mills in Western Division				109,541	112,796	57,680
Terminal elevators in Western Inspection Division				136,540	312,572	134,067
Eastern elevators				Nil	2,115	2,115
Flour mills (eastern)				90	66	385
In transit				15,516	27,618	22,980
Totals				**269,287**	**464,967**	**219,027**

Distribution of Wheat and Oat Crops.—The distribution of the wheat crops of Canada for the years ended July 31, 1937 and 1938, is calculated in Table **10**.

10.—Distribution of the Canadian Wheat Crops, by crop years, 1936-37 and 1937-38.

Note.—Flour is expressed as wheat on the basis of one barrel of flour, weighing 196 lb., being equal to 4½ bushels of wheat. For similar calculations extending over a series of years both for wheat and oats, see the Year Book, 1920, pp. 263-266, and the April issues of the Monthly Bulletin of Agricultural Statistics for each of the years 1920 to 1933. For 1934 and later years, preliminary estimates will be found in the August numbers of the Bulletin.

Item.	Crop Year ended July 31, 1937.	Crop Year ended July 31, 1938.	Item.	Crop Year ended July 31, 1937.	Crop Year ended July 31, 1938.
	'000 bu.	'000 bu.		'000 bu.	'000 bu.
Carry-overs, Aug. 1, 1936, and Aug. 1, 1937	108,094	32,938	Exports as flour	20,365	16,243
Gross production	219,218	180,210	Totals, exports	195,223	92,957
Loss in cleaning	3,500[1]	3,100	Retained as seed	34,112	32,981
Grain not merchantable	1,515	1,658	Retained for feed	15,794	20,103
Net production and carry-overs	322,297[1]	208,390	Milled for food	43,549	42,841
Imports	403	6,139	Carry-overs, July 31, 1937 and July 31, 1938	32,938[1]	23,553
Available for distribution	322,700[1]	214,529	Balances otherwise disposed of	1,084[1]	2,094
Exports as grain	174,858	76,714			

[1] Revised since the publication of the 1938 Year Book.

Table **11** presents similar data for oats. The bulk of this crop is consumed as feed for live stock and the table shows approximately how the remaining portion of the crop is disposed of, including: the quantities exported as grain, oatmeal, and rolled oats; the quantities retained for seed; and the quantities milled for home consumption, representing chiefly oatmeal and rolled oats used for human food. The carry-over represents grain in the elevators, on farms, in transit, etc., and the balance is the quantity used in Canada for feeding to live stock, this amount being estimated at 235,467,000 bushels in 1936-37, and 220,754,000 in 1937-38.

11.—Distribution of the Canadian Oat Crops, by crop years, 1936-37 and 1937-38.

Item.	Crop Year ended July 31, 1937.	Crop Year ended July 31, 1938.	Item.	Crop Year ended July 31, 1937.	Crop Year ended July 31, 1938.
	'000 bu.	'000 bu.		'000 bu.	'000 bu.
Carry-overs, Aug. 1, 1936, and Aug. 1, 1937	40,305	18,266	Exports as meal, etc.	3,503	3,796
Gross production	271,778	268,442	Totals, exports	9,500	8,573
Grain not merchantable	8,509	9,147	Retained as seed	32,621	32,524
Net production and carry-overs	303,574	277,561	Milled for home consumption	7,744[1]	8,029
Imports	24	11,818	Carry-overs, July 31, 1937 and July 31, 1938	18,266[1]	19,499
Available for distribution	303,598	289,379	Balances for home consumption as grain	235,467[1]	220,754
Exports as grain	5,997	4,777			

[1] Revised since the publication of the 1938 Year Book.

Per Capita Consumption of Wheat in Canada.—According to calculations, the average annual per capita consumption of wheat ground for human food in Canada during the ten years 1928 to 1937 was 4·1 bushels. The range for the period was between 3·9 and 4·4 bushels. The per capital consumption in 1937 was estimated at 3·9 bushels. Details for the years 1919-27 were given at p. 241 of the 1929 Year Book. Annual estimates are published in the April number of the Monthly Bulletin of Agricultural Statistics.

Subsection 3.—Farm Live Stock and Poultry.

The growth of the live-stock and poultry industries in Canada from decade to decade is indicated in summary statistical form in Table **12.**

12.—Summary Statistics of the Numbers of Live Stock and Poultry on Farms in Canada, Censuses of 1871-1931.

Item.	1871.	1881.	1891.	1901.	1911.	1921.[1]	1931.
Horses.........	836,743	1,059,358	1,470,572	1,577,493	2,598,958	3,610,494	3,113,909
Cattle..........	2,624,290	3,433,989	4,120,586	5,576,451	6,526,083	8,519,484	7,973,031
Sheep..........	3,155,509	3,048,678	2,563,781	2,510,239	2,174,300	3,203,966	3,627,116
Swine..........	1,366,083	1,207,619	1,733,850	2,353,828	3,634,778	3,040,730	4,699,831
All poultry.....	[2]	[2]	14,105,102[3]	17,922,658	31,793,261	50,325,248	65,184,689[4]
Hens and chickens...	-	-	12,696,701	16,651,337	29,773,457	48,021,647	61,277,229
Turkeys......	-	-	458,306	584,569	863,182	1,096,721	2,223,197
Ducks.......	-	-	320,169	290,755	527,098	603,152	749,930
Geese........	-	-	537,932	395,997	629,524	603,728	902,251
Hives of bees..	144,791	-	199,288	189,986	180,372	185,530	215,349

[1] Includes live stock elsewhere than on farms as follows: horses, 158,742; cattle, 149,995; sheep, 3,499; swine, 80,439; poultry, 6,978,054; hives, 37,425. [2] Poultry not reported for this census. [3] Includes 91,994 unspecified. [4] Includes 32,082 other poultry.

13.—Numbers and Values of Farm Live Stock in Canada, by Provinces, 1935-38.

Province and Item.	Numbers.				Values.			
	1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.
Canada—					$'000	$'000	$'000	$'000
Horses..................	2,931,337	2,891,540	2,882,990	2,820,700	189,341	208,170	206,957	198,938
Milk cows...............	3,849,200	3,885,300	3,940,400	3,873,800	134,000	143,316	156,467	154,732
Other cattle.............	4,971,400	4,955,300	4,900,100	4,637,400	107,152	112,247	123,731	123,354
Sheep....................	3,399,100	3,327,100	3,339,900	3,415,000	17,055	18,077	18,741	19,761
Swine....................	3,549,200	4,145,000	3,963,300	3,486,900	41,778	45,488	48,802	46,078
Totals.........	-	-	-	-	**489,326**	**527,298**	**554,698**	**542,863**
Prince Edward Island—								
Horses..................	27,920	27,600	28,800	28,900	2,289	2,484	2,621	2,717
Milk cows...............	47,000	45,600	46,100	45,800	1,457	1,596	1,706	1,649
Other cattle.............	48,600	47,100	53,400	53,600	1,021	1,130	1,282	1,286
Sheep....................	50,200	48,800	49,600	48,700	272	248	275	269
Swine....................	38,300	41,800	43,900	44,200	468	481	463	564
Totals.........	-	-	-	-	**5,507**	**5,939**	**6,347**	**6,485**
Nova Scotia—								
Horses..................	41,110	40,380	42,500	42,500	3,618	3,796	4,335	4,250
Milk cows...............	116,500	114,300	115,700	115,500	3,845	4,343	4,859	4,736
Other cattle.............	106,600	99,600	113,200	120,600	2,239	2,390	3,170	3,136
Sheep....................	132,800	134,900	137,600	146,200	587	634	718	753
Swine....................	39,700	43,300	50,000	43,800	521	611	715	612
Totals.........	-	-	-	-	**10,810**	**11,774**	**13,797**	**13,487**

13.—Numbers and Values of Farm Live Stock in Canada, by Provinces, 1935-38 —concluded.

Province and Item.	Numbers.				Values.			
	1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.
					$'000	$'000	$'000	$'000
New Brunswick—								
Horses	51,170	49,490	52,300	52,100	5,373	5,493	5,962	5,939
Milk cows	113,600	110,000	111,400	112,600	3,522	3,960	4,010	4,166
Other cattle	94,300	88,600	103,100	104,300	1,603	1,861	2,165	2,295
Sheep	110,900	108,800	107,100	110,400	500	542	560	564
Swine	79,200	82,100	95,200	82,200	1,157	1,302	1,431	1,225
Totals	-	-	-	-	**12,155**	**13,158**	**14,128**	**14,189**
Quebec—								
Horses	266,600	270,600	279,900	289,400	31,992	30,307	32,748	32,992
Milk cows	936,300	938,900	962,400	982,000	31,834	35,678	41,383	40,262
Other cattle	725,900	757,500	801,700	827,000	11,614	16,665	19,241	19,858
Sheep	666,800	654,100	658,000	669,500	3,334	3,427	3,665	3,736
Swine	611,200	704,200	773,900	644,900	8,557	7,535	10,835	9,674
Totals	-	-	-	-	**87,331**	**93,612**	**107,872**	**106,522**
Ontario—								
Horses	562,900	562,900	557,900	560,700	51,787	59,105	57,464	57,191
Milk cows	1,181,800	1,181,500	1,175,900	1,174,400	49,636	54,349	56,443	55,197
Other cattle	1,287,400	1,292,700	1,278,300	1,317,900	37,335	38,781	40,906	40,855
Sheep	945,700	886,500	874,700	858,300	5,731	6,206	6,088	6,369
Swine	1,225,300	1,408,300	1,487,900	1,430,300	14,887	16,379	18,450	18,808
Totals	-	-	-	-	**159,376**	**174,820**	**179,351**	**178,420**
Manitoba—								
Horses	297,000	304,400	324,700	325,000	16,038	18,873	20,781	18,850
Milk cows	329,800	327,900	390,400	383,700	9,894	9,509	12,493	12,662
Other cattle	429,700	419,500	456,600	458,300	8,594	8,810	10,958	11,458
Sheep	218,000	207,900	216,200	231,000	970	1,017	1,096	1,208
Swine	183,500	269,700	228,900	219,000	2,004	3,015	2,747	2,845
Totals	-	-	-	-	**37,500**	**41,224**	**48,075**	**47,023**
Saskatchewan—								
Horses	933,800	898,300	873,600	806,200	45,756	50,305	46,301	40,310
Milk cows	553,900	591,100	563,700	496,600	15,509	15,960	15,784	15,395
Other cattle	932,300	943,900	877,500	632,100	17,714	16,990	17,550	15,170
Sheep	459,700	342,300	345,000	336,900	1,903	1,499	1,628	1,651
Swine	514,400	666,800	454,100	267,600	5,478	6,861	5,036	3,372
Totals	-	-	-	-	**86,360**	**91,615**	**86,299**	**75,898**
Alberta—								
Horses	691,300	677,000	661,200	648,800	29,035	33,850	32,399	31,791
Milk cows	464,200	458,200	453,600	440,900	12,998	11,913	13,608	14,550
Other cattle	1,140,000	1,095,900	1,003,700	920,700	21,660	19,726	22,081	23,018
Sheep	639,600	765,900	768,500	833,800	2,737	3,454	3,566	4,144
Swine	809,100	877,800	773,700	707,000	8,140	8,655	8,410	8,350
Totals	-	-	-	-	**74,570**	**77,598**	**80,064**	**81,853**
British Columbia—								
Horses	59,537	60,870	62,090	67,100	3,453	3,957	4,346	4,898
Milk cows	106,100	117,800	121,200	122,300	5,305	6,008	6,181	6,115
Other cattle	206,600	210,500	212,600	202,500	5,372	5,894	6,378	6,278
Sheep	175,400	177,900	183,200	180,200	1,021	1,050	1,145	1,067
Swine	48,500	51,000	55,700	47,900	566	649	715	628
Totals	-	-	-	-	**15,717**	**17,558**	**18,765**	**18,986**

14.—Average Values per Head of Farm Live Stock in Canada, by Provinces, 1936-38.

NOTE.—Figures for 1925-34 will be found at pp. 272-273 of the 1934-35 Year Book; those for 1935 at p. 253 of the 1938 edition.

Province and Item.	1936.	1937.	1938.	Province and Item.	1936.	1937.	1938.
	$	$	$		$	$	$
Canada—				**Ontario—**			
Horses	72	72	71	Horses	105	103	102
Milk cows	37	40	40	Milk cows	46	48	47
Other cattle	23	25	27	Other cattle	30	32	31
All cattle	29	32	33	All cattle	38	40	39
Sheep	5·42	5·61	5·79	Sheep	7·00	6·96	7·42
Swine	10·98	12·31	13·21	Swine	11·63	12·40	13·15
Prince Edward Island—				**Manitoba—**			
Horses	90	91	94	Horses	62	64	58
Milk cows	35	37	36	Milk cows	29	32	33
Other cattle	24	24	24	Other cattle	21	24	25
All cattle	29	30	30	All cattle	24	28	29
Sheep	5·08	5·55	5·53	Sheep	4·89	5·07	5·23
Swine	11·50	10·55	12·75	Swine	11·18	12·00	12·99
Nova Scotia—				**Saskatchewan—**			
Horses	94	102	100	Horses	56	53	50
Milk cows	38	42	41	Milk cows	27	28	31
Other cattle	24	28	26	Other cattle	18	20	24
All cattle	31	35	33	All cattle	21	23	27
Sheep	4·70	5·22	5·15	Sheep	4·38	4·72	4·90
Swine	14·10	14·30	13·97	Swine	10·29	11·09	12·60
New Brunswick—				**Alberta—**			
Horses	111	114	114	Horses	50	49	49
Milk cows	36	36	37	Milk cows	26	30	33
Other cattle	21	21	22	Other cattle	18	22	25
All cattle	29	29	30	All cattle	20	24	28
Sheep	4·98	5·23	5·11	Sheep	4·51	4·64	4·97
Swine	15·86	15·03	14·90	Swine	9·86	10·87	11·81
Quebec—				**British Columbia—**			
Horses	112	117	114	Horses	65	70	73
Milk cows	38	43	41	Milk cows	51	51	50
Other cattle	22	24	24	Other cattle	28	30	31
All cattle	31	34	33	All cattle	36	38	38
Sheep	5·24	5·57	5·58	Sheep	5·90	6·25	5·92
Swine	10·70	14·00	15·00	Swine	12·73	12·84	13·12

15.—Numbers and Values of Farm Poultry in Canada, by Provinces, 1937 and 1938.

Province and Item.	No.	Average Value per Head.	Total Value.	Province and Item.	No.	Average Value per Head.	Total Value.
		$	$			$	$
Canada—				**P. E. Island—**			
Hens and chickens.....1937	53,982,900	0·69	37,335,000	Hens and chickens......1937	826,200	0·72	595,000
1938	53,774,600	0·68	36,793,000	1938	830,200	0·77	639,000
Turkeys.......1937	1,997,900	1·90	3,804,000	Turkeys........1937	11,800	1·89	22,000
1938	2,039,600	1·89	3,859,000	1938	11,000	1·86	20,000
Geese..........1937	874,900	1·44	1,259,000	Geese..........1937	26,300	1·36	36,000
1938	807,000	1·45	1,167,000	1938	21,000	1·35	28,000
Ducks.........1937	654,400	0·85	556,000	Ducks..........1937	13,900	0·81	11,000
1938	615,800	0·86	531,000	1938	10,500	0·83	9,000
Totals, Canada..1937	**57,510,100**	-	**42,954,000**	**Totals, P.E.I....1937**	**878,200**	-	**664,000**
1938	**57,237,000**	-	**42,350,000**	**1938**	**872,700**	-	**696,000**

15.—Numbers and Values of Farm Poultry in Canada, by Provinces, 1937 and 1938—concluded.

Province and Item.	No.	Average Value per Head.	Total Value.	Province and Item.	No.	Average Value per Head.	Total Value.
		$	$			$	$
Nova Scotia—				**Manitoba—**			
Hens and chickens.....1937	1,211,600	0·73	884,000	Hens and chickens......1937	3,832,000	0·58	2,223,000
1938	1,224,700	0·73	894,000	1938	4,512,000	0·55	2,482,000
Turkeys........1937	15,700	2·23	35,000	Turkeys.........1937	392,600	1·86	730,000
1938	15,500	2·32	36,000	1938	451,000	1·71	771,000
Geese..........1937	11,700	1·78	21,000	Geese..........1937	72,500	1·19	86,000
1938	10,200	1·74	18,000	1938	73,000	1·12	82,000
Ducks.........1937	5,100	0·91	5,000	Ducks..........1937	35,900	0·69	25,000
1938	4,600	0·88	4,000	1938	45,000	0·66	30,000
Totals, N.S......1937	**1,244,100**	-	**945,000**	**Totals, Man....1937**	**4,333,000**	-	**3,064,000**
1938	**1,255,000**	-	**952,000**	**1938**	**5,081,000**	-	**3,365,000**
New Brunswick—				**Saskatchewan—**			
Hens and chickens.....1937	1,289,900	0·83	1,071,000	Hens and chickens......1937	8,116,000	0·44	3,571,000
1938	1,261,100	0·78	984,000	1938	7,282,400	0·41	2,986,000
Turkeys........1937	26,600	2·52	67,000	Turkeys.........1937	524,000	1·56	817,000
1938	24,600	2·72	67,000	1938	484,600	1·63	790,000
Geese..........1937	14,300	1·68	24,000	Geese..........1937	111,100	1·01	112,000
1938	12,900	1·76	23,000	1938	79,300	1·08	86,000
Ducks.........1937	8,500	1·14	10,000	Ducks..........1937	74,200	0·59	44,000
1938	7,900	1·01	8,000	1938	44,200	0·64	28,000
Totals, N.B......1937	**1,339,300**	-	**1,172,000**	**Totals, Sask....1937**	**8,825,300**	-	**4,544,000**
1938	**1,306,500**	-	**1,082,000**	**1938**	**7,890,500**	-	**3,890,000**
Quebec—				**Alberta—**			
Hens and chickens.....1937	7,362,300	0·88	6,479,000	Hens and chickens......1937	6,161,100	0·45	2,772,000
1938	7,234,300	0·91	6,583,000	1938	6,325,000	0·47	2,973,000
Turkeys........1937	110,700	2·46	272,000	Turkeys.........1937	444,500	1·60	711,000
1938	112,300	2·35	264,000	1938	445,000	1·61	716,000
Geese..........1937	61,100	1·63	100,000	Geese..........1937	123,000	1·01	124,000
1938	59,400	1·53	91,000	1938	101,100	1·03	104,000
Ducks.........1937	69,000	0·95	66,000	Ducks..........1937	64,900	0·59	38,000
1938	79,000	1·05	83,000	1938	49,500	0·59	29,000
Totals, Que.....1937	**7,603,100**	-	**6,917,000**	**Totals, Alta.....1937**	**6,793,500**	-	**3,645,000**
1938	**7,485,000**	-	**7,021,000**	**1938**	**6,920,600**	-	**3,822,000**
Ontario—				**British Columbia—**			
Hens and chickens.....1937	21,314,300	0·79	16,838,000	Hens and chickens......1937	3,869,500	0·75	2,902,000
1938	21,188,900	0·77	16,315,000	1938	3,916,000	0·75	2,937,000
Turkeys........1937	425,400	2·42	1,029,000	Turkeys.........1937	46,600	2·60	121,000
1938	445,800	2·40	1,070,000	1938	49,800	2·51	125,000
Geese..........1937	446,200	1·66	741,000	Geese..........1937	8,700	1·77	15,000
1938	441,500	1·63	720,000	1938	8,600	1·74	15,000
Ducks.........1937	350,300	0·93	326,000	Ducks..........1937	32,600	0·95	31,000
1938	343,800	0·90	309,000	1938	31,300	1·00	31,000
Totals, Ont.....1937	**22,536,200**	-	**18,934,000**	**Totals, B.C......1937**	**3,957,400**	-	**3,069,000**
1938	**22,420,000**	-	**18,414,000**	**1938**	**4,005,700**	-	**3,108,000**

Wool Production in Canada, 1920-38.—Revised estimates of shorn and pulled wool production in Canada for the years 1920 to 1938 are contained in Table **16**; the apparent consumption is also calculated from production, exports, and imports. The production of shorn wool is based on data secured from the Censuses of 1921, 1926, 1931, and 1936, and on a special survey made in the summer of 1938. Estimates of the number of sheep shorn were made from data obtained in the annual livestock surveys. Total shorn wool is calculated by multiplying the number of sheep shorn by the estimated average yield per sheep.

Estimates of pulled wool production are based on the number of sheep and lambs sold alive off farms. An average yield of 3½ lb. per animal was applied to the sales.

The revised estimates of both shorn and pulled wool production are lower than the estimates previously published. Hitherto, an average of 7½ lb. per fleece has been used in calculating shorn wool production. The revised estimates take account of variations in yield due to differences in breeds and types of sheep and climatic conditions in different sections of Canada.

The prices applied to the production of shorn wool were those obtained annually from farm correspondents of the Dominion Bureau of Statistics.

16.—Estimated Production, Exports, Imports, and Apparent Consumption of Wool in Canada, 1920-38.

Year.	Estimated Production.						Exports.	Imports.	Apparent Consumption.
	Shorn.				Pulled.	Total Production.			
	Yield per Fleece.	Total Yield Shorn.	Price per lb.	Total Value Shorn.					
	lb.	'000 lb.	cts.	$	'000 lb.	'000 lb.	'000 lb.	'000 lb.	'000 lb.
1920........	6·3	11,306	21	2,364,000	3,598	14,904	6,289	12,260	20,875
1921........	6·4	11,368	13	1,522,600	3,494	14,862	3,310	9,133	20,685
1922........	6·4	10,854	17	1,832,500	3,206	14,060	7,159	15,885	22,786
1923........	6·5	9,334	20	1,865,100	2,674	12,008	6,318	21,099	26,789
1924........	6·6	8,943	25	2,211,000	2,718	11,661	6,320	15,389	20,730
1925........	6·6	9,602	25	2,403,200	2,602	12,204	6,351	13,561	19,414
1926........	6·8	10,607	23	2,394,400	2,881	13,488	4,389	15,363	24,462
1927........	6·8	11,261	22	2,455,400	3,248	14,509	11,357	14,354	17,506
1928........	6·9	12,143	25	3,082,200	3,342	15,485	8,351	14,271	21,405
1929........	6·9	12,679	20	2,590,200	3,776	16,455	6,090	12,086	22,451
1930........	7·0	12,800	11	1,392,400	3,852	16,652	4,382	9,459	21,729
1931........	7·0	13,575	8	1,050,400	4,250	17,825	4,770	10,849	23,904
1932........	7·1	14,027	5	721,900	4,087	18,114	3,712	8,717	23,119
1933........	7·1	13,308	10	1,364,300	4,511	17,819	11,258	13,761	20,322
1934........	6·9	13,135	10	1,254,600	4,443	17,578	4,260	14,932	28,250
1935........	7·1	13,320	11	1,492,500	4,499	17,819	8,363	14,872	24,328
1936........	7·2	13,057	14	1,861,200	4,374	17,431	9,103	22,782	31,110
1937........	7·2	13,271	15	2,048,700	4,358	17,629	4,813	24,427	37,243
1938........	7·3	13,386	11	1,497,800	4,309	17,695	4,260	15,524	28,959

Egg Production.—The data for egg-laying hens in Table **17** were calculated from the numbers of mature birds shown in the June surveys, with reductions to allow for cocks and cockerels. The production of eggs per hen and the average prices were calculated with the assistance and advice of extension workers and poultrymen connected with the provincial Departments of Agriculture.

17.—Annual Production and Value of Farm Eggs in Canada, by Provinces, 1936-38.

Province.	Year.	Laying Hens.	Eggs per Hen.	Eggs Produced.	Price per Dozen.	Value.
		No.	No.	doz.	cts.	$
Prince Edward Island	1937	428,000	91	3,246,000	17	552,000
	1938	425,000	90	3,188,000	19	606,000
Nova Scotia	1937	519,000	93	4,022,000	21	845,000
	1938	495,000	93	3,836,000	22·5	863,000
New Brunswick	1937	573,000	94	4,489,000	20	898,000
	1938	584,000	93	4,526,000	21·5	973,000
Quebec	1937	3,431,000[1]	116	33,166,000	19	6,302,000
	1938	3,286,000	116	31,765,000	21	6,671,000
Ontario	1937	8,210,000	120	82,100,000	19·5	16,010,000
	1938	7,820,000	120	78,200,000	21·5	16,813,000
Manitoba	1937	1,915,000	104[1]	16,597,000[1]	15	2,490,000
	1938	2,102,000	104	18,200,000	16	2,912,000
Saskatchewan	1937	4,330,000	98	35,362,000[1]	13·5	4,774,000
	1938	3,917,000	99	32,315,000	14	4,524,000
Alberta	1937	2,972,000	99	24,519,000	12	2,942,000
	1938	2,779,000	100	23,158,000	13	3,011,000
British Columbia	1937	1,483,000	129	15,942,000	23	3,667,000
	1938	1,681,000	130	18,211,000	23·5	4,280,000
Totals	**1937**	**23,861,000**	**110**	**219,443,000**	**17·5**	**38,480,000**
	1938	**23,089,000**	**111**	**213,399,000**	**19**	**40,653,000**

[1] Revised since the publication of the 1938 Year Book.

Subsection 4—Dairying Statistics.

Statistics of the dairy industry of Canada are dealt with in the following sequence: total milk production, showing the quantities used for domestic purposes, live-stock feeding, and manufacturing; the value of dairy production, showing, separately, the total value of all products, and the farm value on a milk basis; the production of butter and cheese; miscellaneous milk products, consisting principally of concentrated milk and ice cream; and, finally, the estimated consumption of butter, cheese, and milk, the latter being shown by provinces on a basis of classified population groups.

The data given in these tables for 1938 are preliminary, while those for previous years are final. Special note should be made of the revisions in the quantities and values of milk otherwise used, necessitating significant changes in the quantities and values of the total milk production of Canada previously published. Revisions for the years prior to 1936 will appear in a subsequent issue of the Canada Year Book. All estimates have been made by the Dominion Bureau of Statistics on the advice of, or in co-operation with, the provincial dairy commissioners.

Total Milk Production.—The data presented in Table **18** represent the complete distribution of milk production and reveal a total of 15,770,235,900 lb. for 1938, an increase of 443,508,300 lb. or 2·9 p.c. over the previous year.

Total Value of Dairy Production.—The value of all dairy products in 1938 as shown in Table **19** is estimated at $220,163,527, an increase of $4,540,265 or 2·18 p.c. as compared with 1937.

Farm Value of Milk Production.—The data shown in Table **20** represent the total value of milk produced on farms. These values are based on the average prices of milk for domestic or manufacturing purposes at plants less local haulage costs. For the year 1938 the farm value of milk production amounted to $150,201,000, an increase of $6,507,000 or 4·5 p.c. in comparison with that of the preceding year. Deducting the quantities fed to live stock, the balance representing the gross farm income from dairy production is placed at $144,221,000 in 1938. The gross income from the sale of dairy products for the year 1938 is estimated at $118,652,000. This calculation is made by the addition of fluid sales and the sales of milk for dairy factory products (columns 2 and 3 in Table **20**), plus the estimated revenue received from the sale of dairy butter ($6,431,000) which does not appear in this table. For further details refer to *Dairying Statistics of Canada, 1938*, published by the Dominion Bureau of Statistics.

Butter and Cheese.—The butter output of creameries in 1938 was 266,886,900 lb. and the estimated production of dairy butter amounted to 105,076,000 lb., a total of 371,962,900 lb. The latter represents an increase of 16,822,154 lb. or 4·78 p.c. over that of the previous year. The production of factory cheese in Canada in 1938 amounted to 121,314,600 lb. and together with the farm make of 1,101,300 lb. reached a total of 122,415,900 lb. The latter figures, in comparison with the 1937 production, revealed a decrease of 9,442,238 lb. or 7·2 p.c.

Miscellaneous Factory Products.—The production of concentrated whole milk products amounted to 122,180,000 lb. in 1938, and evaporated milk included in this figure 105,592,000 lb. The production of concentrated milk by-products reached a total of 38,984,000 lb. of which evaporated skim milk represented 25,921,000 lb. All concentrated milk products, whole milk and milk by-products combined, amounted to 161,164,000 lb. valued at $11,774,000, representing increases of 17·3 p.c. and 15·7 p.c., respectively, over that of the previous year. Ice cream production, also included in the miscellaneous group, amounted to 5,723,232 gal. valued at $6,965,444.

Apparent Consumption of Butter, Cheese and Milk.—The apparent consumption of butter and cheese for the years 1934-38 is shown in the Internal Trade Chapter of this volume (Table **17** of Chapter XVII). This shows that butter consumption in 1938 amounted to 356,797,062 lb., revealing a per capita consumption of 31·83 lb. Cheese consumption amounted to 40,555,515 lb. and a per capita consumption of 3·62 lb. The daily per capita milk consumption is shown in Table **23.**

18.—Total Milk Production of Canada, by Provinces, 1936-38.

Province and Year.	Total Milk Production.	Milk Not Manufactured.			Milk Manufactured.	
		Fluid Sales.	Farm Consumed.	Fed on Farms.	On Farms.	In Factories.
Prince Edward Island.	lb.	lb.	lb.	lb.	lb.	lb.
1936	143,147,600	13,697,000	26,214,000	7,360,000	43,594,400	52,282,200
1937	142,320,700	12,765,000	24,429,000	8,920,000	40,549,400	55,657,300
1938	148,587,100	13,361,000	25,569,000	8,960,000	36,499,400	64,197,700
Nova Scotia......1936	462,744,300	89,849,000	56,330,000	15,040,000	152,506,000	149,019,300
1937	469,789,500	90,605,000	56,804,000	18,320,000	151,335,000	152,725,500
1938	500,901,600	96,841,000	60,713,000	18,360,000	152,969,000	172,018,600
New Brunswick...1936	383,415,800	54,520,000	67,282,000	15,600,000	156,306,000	89,707,800
1937	380,412,700	53,689,000	66,257,000	18,200,000	146,603,000	95,663,700
1938	420,002,300	59,623,000	73,579,000	17,760,000	153,485,000	115,555,300
Quebec..........1936	3,786,432,200	900,639,000	359,243,000	146,720,000	332,905,000	2,046,925,200
1937	3,902,468,500	928,184,000	370,230,000	151,440,000	342,171,000	2,110,443,500
1938	3,974,986,700	944,773,000	376,846,000	156,920,000	307,904,000	2,188,543,700
Ontario..........1936	5,698,508,900	1,148,047,000	478,935,000	225,880,000	615,764,000	3,229,882,900
1937	5,613,532,700	1,085,872,000	452,997,000	223,640,000	618,683,000	3,232,340,700
1938	5,694,384,700	1,101,903,000	459,685,000	224,920,000	581,581,000	3,326,295,700
Manitoba.........1936	1,153,775,700	128,802,000	136,360,000	71,160,000	247,675,000	569,778,700
1937	1,177,131,200	123,153,000	130,379,000	73,960,000	240,667,000	608,972,200
1938	1,245,833,300	130,675,000	138,343,000	75,280,000	252,572,000	648,963,300
Saskatchewan....1936	1,713,385,400	119,084,000	287,096,000	156,880,000	574,038,000	576,287,400
1937	1,678,753,500	117,117,000	282,353,000	147,960,000	569,367,000	561,956,500
1938	1,619,551,700	114,870,000	276,938,000	118,120,000	547,922,000	561,701,700
Alberta..........1936	1,482,738,600	148,522,000	183,238,000	151,400,000	378,133,000	621,445,600
1937	1,501,267,600	152,067,000	187,610,000	138,160,000	368,791,000	654,639,600
1938	1,662,322,500	170,319,000	210,129,000	135,600,000	367,996,000	778,278,500
British Columbia.1936	500,265,000	186,855,000	36,040,000	22,280,000	65,151,000	189,939,000
1937	461,051,200	164,409,000	31,711,000	20,880,000	65,879,000	178,172,200
1938	503,666,000	180,506,000	34,815,000	20,400,000	71,238,000	196,707,000
Totals........1936	**15,324,413,500**	**2,790,015,000**	**1,630,738,000**	**812,320,000**	**2,566,072,400**	**7,525,268,100**
1937	**15,326,727,600**	**2,727,861,000**	**1,602,770,000**	**801,480,000**	**2,544,045,400**	**7,650,571,200**
1938	**15,770,235,900**	**2,812,871,000**	**1,656,617,000**	**776,320,000**	**2,472,166,400**	**8,052,261,500**

19.—Total Value of the Dairy Production of Canada, by Provinces, 1936-38.

Province and Year.	Butter.		Cheese.		Miscellaneous Factory Products.	Milk Otherwise Used.[2]	Total All Products.[1]
	Dairy.	Creamery.	Farm-made.	Factory.			
Prince Edward Island.	$	$	$	$	$	$	$
1936	369,000	503,987	28	42,112	44,788	531,000	1,631,915
1937	398,000	571,970	27	64,705	48,749	536,000	1,757,451
1938	359,000	687,600	27	62,900	52,000	571,000	1,878,527
Nova Scotia......1936	1,625,000	1,454,663	4,000	–	714,372	2,737,000	6,949,035
1937	1,743,000	1,677,460	2,000	–	838,964	2,915,000	7,675,424
1938	1,695,000	1,873,900	4,000	–	747,800	3,123,000	7,889,700
New Brunswick...1936	1,602,000	851,088	1,000	58,918	230,488	1,985,000	5,093,494
1937	1,627,000	952,143	1,000	84,668	291,567	2,031,000	5,387,378
1938	1,639,000	1,165,900	1,000	75,000	300,700	2,245,000	5,799,600
Quebec...........1936	2,961,000	17,176,664	35,000	3,306,850	1,897,058	22,899,000	50,437,572
1937	3,189,000	19,390,003	36,000	4,128,268	2,585,076	24,193,000	55,711,347
1938	2,740,000	19,407,500	31,000	3,719,800	2,634,200	24,889,000	55,702,500
Ontario...........1936	4,828,000	20,733,275	16,000	11,547,806	11,181,667	30,624,000	81,829,748
1937	5,800,000	22,029,642	17,000	12,932,563	14,484,443	29,600,000	87,646,648
1938	5,328,000	23,028,000	16,000	11,776,500	16,020,900	30,199,000	89,153,400
Manitoba..........1936	1,811,000	4,873,368	21,000	273,988	614,679	3,927,000	12,609,035
1937	1,989,000	5,954,436	22,000	394,773	596,803	3,994,000	14,083,012
1938	2,088,000	6,168,900	21,000	448,100	1,039,300	4,370,000	15,363,300
Saskatchewan.....1936	3,782,000	5,095,182	33,000	72,266	522,916	5,198,000	15,819,364
1937	4,356,000	5,686,510	35,000	50,709	542,698	5,280,000	17,131,917
1938	3,729,000	4,940,100	26,000	56,800	566,100	5,193,000	15,669,000
Alberta...........1936	2,560,000	5,501,767	35,000	190,469	667,387	5,108,000	15,097,623
1937	2,964,000	6,443,107	42,000	267,802	952,016	5,411,000	17,210,925
1938	2,839,000	7,247,500	30,000	355,500	988,900	6,068,000	18,791,900
British Columbia.1936	468,000	1,472,166	17,000	73,404	2,197,408	4,592,000	9,203,978
1937	556,000	1,512,061	19,000	41,635	2,403,464	4,127,000	9,019,160
1938	540,000	1,561,300	22,000	102,900	2,675,400	4,629,000	9,915,600
Totals........1936	**20,006,000**	**57,662,160**	**162,028**	**15,565,813**	**18,070,763**	**77,601,000**	**198,671,764**
1937	**22,622,000**	**64,217,332**	**174,027**	**17,965,123**	**22,743,780**	**78,087,000**	**215,623,262**
1938	**20,957,000**	**66,080,700**	**151,027**	**16,597,500**	**25,025,300**	**81,287,000**	**220,163,527**

---

[1] The data in this column include the total value of skim milk and buttermilk. For all Canada this amounted to $10,065,000 in 1938, as compared with $9,814,000 in 1937, and $9,604,000 in 1936.

[2] Consists of milk sold for domestic use valued at plants, and milk consumed and milk fed valued at farms.

20.—Farm Value of the Milk Production of Canada, by Provinces, 1936-38.[1]

Province and Year.	Manufactured.		Milk Otherwise Used.			Total Value.
	On Farms.	In Factories.	Fluid Sales.	Farm Consumed.	Fed on Farms.	
	$	$	$	$	$	$
Prince Edward Island...1936	336,000	431,000	174,000	202,000	57,000	1,200,000
1937	332,000	486,000	172,000	200,000	73,000	1,263,000
1938	307,000	573,000	186,000	215,000	75,000	1,356,000
Nova Scotia............1936	1,373,000	1,460,000	1,453,000	507,000	135,000	4,928,000
1937	1,468,000	1,604,000	1,537,000	551,000	178,000	5,338,000
1938	1,484,000	1,806,000	1,660,000	589,000	178,000	5,717,000
New Brunswick........1936	1,344,000	850,000	867,000	579,000	134,000	3,774,000
1937	1,305,000	933,000	881,000	590,000	162,000	3,871,000
1938	1,366,000	1,124,000	990,000	655,000	158,000	4,293,000
Quebec.................1936	2,430,000	16,394,000	12,609,000	2,622,000	1,071,000	35,126,000
1937	2,703,000	18,169,000	13,273,000	2,925,000	1,196,000	38,266,000
1938	2,463,000	19,051,000	13,699,000	3,015,000	1,255,000	39,483,000
Ontario.................1936	4,865,000	26,813,000	16,876,000	3,784,000	1,784,000	54,122,000
1937	5,197,000	28,431,000	16,179,000	3,805,000	1,879,000	55,491,000
1938	4,943,000	29,585,000	16,528,000	3,907,000	1,912,000	56,875,000
Manitoba...............1936	1,486,000	4,445,000	1,613,000	818,000	427,000	8,789,000
1937	1,540,000	4,976,000	1,663,000	834,000	473,000	9,486,000
1938	1,642,000	5,367,000	1,895,000	899,000	489,000	10,292,000
Saskatchewan..........1936	3,559,000	4,403,000	1,577,000	1,780,000	973,000	12,292,000
1937	3,758,000	4,518,000	1,587,000	1,864,000	977,000	12,704,000
1938	3,726,000	4,629,000	1,669,000	1,883,000	803,000	12,710,000
Alberta.................1936	2,344,000	4,646,000	1,953,000	1,136,000	939,000	11,018,000
1937	2,471,000	5,221,000	2,118,000	1,257,000	926,000	11,993,000
1938	2,502,000	6,285,000	2,466,000	1,429,000	922,000	13,604,000
British Columbia.......1936	573,000	1,807,000	2,672,000	317,000	196,000	5,565,000
1937	613,000	1,780,000	2,400,000	295,000	194,000	5,282,000
1938	655,000	1,946,000	2,762,000	320,000	188,000	5,871,000
Totals..............1936	**18,310,000**	**61,249,000**	**39,794,000**	**11,745,000**	**5,716,000**	**136,814,000**
1937	**19,387,000**	**66,118,000**	**39,810,000**	**12,321,000**	**6,058,000**	**143,694,000**
1938	**19,088,000**	**70,366,000**	**41,855,000**	**12,912,000**	**5,980,000**	**150,201,000**

---

[1] The data in this table are based on the values of whole milk on farms, the haulage costs for milk and cream being deducted from the plant values to obtain the figures shown.

21.—Production of Butter and Cheese in Canada, by Provinces, 1936-38.

Province and Year.	Butter.			Cheese.		
	Dairy.	Creamery.	Total.	Farm-made	Factory.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.
Prince Edward Island...1936	1,862,000	2,068,065	3,930,065	300	296,354	296,654
1937	1,732,000	2,131,508	3,863,508	300	461,583	461,883
1938	1,559,000	2,500,500	4,059,500	300	449,400	449,700
Nova Scotia............1936	6,500,000	5,754,887	12,254,887	30,000	Nil	30,000
1937	6,455,000	5,874,068	12,329,068	20,000	"	20,000
1938	6,520,000	6,716,400	13,236,400	30,000	"	30,000
New Brunswick........1936	6,674,000	3,502,529	10,176,529	5,000	419,022	424,022
1937	6,260,000	3,623,787	9,883,787	5,000	597,162	602,162
1938	6,554,000	4,519,100	11,073,100	5,000	539,500	544,500
Quebec..................1936	14,099,000	74,487,024	88,586,024	255,000	25,375,881	25,630,881
1937	14,494,000	74,557,923	89,051,923	256,000	30,362,479	30,618,479
1938	13,045,000	79,214,400	92,259,400	225,000	27,554,100	27,779,100
Ontario..................1936	26,240,000	86,705,979	112,945,979	132,000	88,457,007	88,589,007
1937	26,365,000	81,396,261	107,761,261	132,000	93,867,645	93,999,645
1938	24,783,000	87,893,100	112,676,100	126,000	85,959,900	86,085,900
Manitoba................1936	10,500,000	23,011,056	33,511,056	167,000	2,140,765	2,307,765
1937	10,200,000	24,343,485	34,543,485	168,000	2,923,873	3,091,873
1938	10,710,000	25,703,700	36,413,700	165,000	3,344,200	3,509,200
Saskatchewan..........1936	24,400,000	24,097,537	48,497,537	253,000	511,995	764,995
1937	24,200,000	23,571,938	47,771,938	254,000	343,449	597,449
1938	23,305,000	23,524,300	46,829,300	210,000	421,000	631,000
Alberta..................1936	16,000,000	25,491,105	41,491,105	319,000	1,451,735	1,770,735
1937	15,600,000	26,323,562	41,923,562	321,000	1,838,589	2,159,589
1938	15,600,000	31,239,300	46,839,300	250,000	2,451,800	2,701,800
British Columbia.......1936	2,751,000	5,813,595	8,564,595	68,000	470,724	538,724
1937	2,778,000	5,234,214	8,012,214	76,000	231,058	307,058
1938	3,000,000	5,576,100	8,576,100	90,000	594,700	684,700
Totals............1936	**109,026,000**	**250,931,777**	**359,957,777**	**1,229,300**	**119,123,483**	**120,352,783**
1937	**108,084,000**	**247,056,746**	**355,140,746**	**1,232,300**	**130,625,838**	**131,858,138**
1938	**105,076,000**	**266,886,900**	**371,962,900**	**1,101,300**	**121,314,600**	**122,415,900**

22.—Production and Value of Miscellaneous Products of Dairy Factories, 1936-38.

Item.	Production.			Value.		
	1936.	1937.	1938.	1936.	1937.	1938.
	lb.	lb.	lb.	$	$	$
Concentrated Whole Milk Products—						
Condensed milk................	7,986,693	11,395,680	9,686,000	724,175	1,004,567	853,000
Evaporated milk...............	71,074,564	91,330,715	105,592,000	4,585,838	6,161,142	7,121,000
Milk powder.....................	2,735,745	5,454,997	6,795,000	351,890	833,480	1,038,000
Cream powder..................	45,244	36,336	29,000	15,403	12,962	10,000
Condensed coffee..............	85,860	83,649	78,000	11,006	11,443	11,000
Totals......................	81,928,106	108,301,377	122,180,000	5,688,312	8,122,436	9,033,000
Concentrated Milk By-Products—						
Condensed skim milk...........	4,515,713	4,999,582	5,014,000	233,402	259,911	261,000
Evaporated skim milk..........	185,655	726,993	670,000	4,889	19,524	18,000
Skim milk powder..............	18,529,782	18,492,326	25,921,000	1,237,059	1,422,768	1,994,000
Condensed buttermilk..........	921,783	576,914	1,243,000	21,594	11,916	26,000
Buttermilk powder.............	2,210,953	2,542,081	4,339,000	103,936	147,230	251,000
Casein..........................	1,335,910	1,572,314	1,498,000	134,518	181,953	173,000
Sugar of milk..................	186,423	188,276	299,000	11,186	11,296	18,000
Totals......................	27,886,219	29,098,486	38,984,000	1,746,584	2,054,598	2,741,000
Ice cream........................	4,925,767	5,538,554	5,723,232	5,729,256	6,689,083	6,965,444
Sundries..........................	–	–	–	1,225,811	1,814,804	2,079,322

23.—Per Capita Daily Consumption of Milk in Canada, by Provinces, 1936-38.

Province and Year.	Milk Consumed.			Population.			Daily Consumption per Capita.		
	Farm.[1]	Non-Farm.[1]	Total.	Farm.	Non-Farm.	Total	Farm.	Non-Farm.	Total
	'000 pt.	'000 pt.	'000 pt.	'000	'000	'000	pt.	pt.	pt.
Prince Edward Island.1936	19,342	10,320	29,662	50	42	92	1·07	0·67	0·88
1937	18,025	9,617	27,642	50	43	93	0·99	0·61	0·81
1938	18,866	10,066	28,932	51	43	94	1·02	0·64	0·84
Nova Scotia..........1936	41,564	67,692	109,256	154	383	537	0·74	0·49	0·56
1937	41,914	68,261	110,175	156	386	542	0·74	0·48	0·56
1938	44,798	72,960	117,758	158	390	548	0·78	0·51	0·59
New Brunswick.......1936	49,645	41,075	90,720	159	276	435	0·85	0·41	0·57
1937	48,889	40,449	89,338	161	279	440	0·83	0·40	0·56
1938	54,292	44,919	99,211	163	282	445	0·91	0·44	0·61
Quebec...............1936	265,072	678,540	943,612	720	2,376	3,096	1·01	0·78	0·84
1937	273,179	699,293	972,472	729	2,406	3,135	1·03	0·80	0·85
1938	278,062	711,790	989,852	737	2,435	3,172	1·03	0·80	0·86
Ontario...............1936	353,388	864,937	1,218,325	731	2,958	3,689	1·33	0·80	0·91
1937	334,250	818,094	1,152,344	735	2,976	3,711	1·25	0·75	0·85
1938	339,185	830,171	1,169,356	739	2,992	3,731	1·26	0·76	0·86
Manitoba.............1936	100,615	97,040	197,655	219	492	711	1·26	0·54	0·76
1937	96,202	92,783	188,985	221	496	717	1·19	0·51	0·72
1938	102,078	98,451	200,529	222	498	720	1·26	0·54	0·76
Saskatchewan........1936	211,838	89,717	301,555	420	511	931	1·38	0·48	0·89
1937	208,338	88,236	296,574	423	516	939	1·35	0·47	0·87
1938	204,342	86,543	290,885	424	517	941	1·32	0·46	0·85
Alberta...............1936	135,205	111,896	247,101	284	489	773	1·31	0·63	0·88
1937	138,431	114,566	252,997	286	492	778	1·33	0·64	0·89
1938	155,047	128,318	283,365	287	496	783	1·48	0·71	0·99
British Columbia.....1936	26,593	140,776	167,369	72	678	750	1·02	0·57	0·61
1937	23,398	123,866	147,264	72	679	751	0·89	0·50	0·54
1938	25,689	135,992	161,681	73	688	761	0·97	0·54	0·58
Totals............1936	**1,203,262**	**2,101,993**	**3,305,255**	**2,809**	**8,205**	**11,014**	**1·17**	**0·70**	**0·82**
1937	**1,182,626**	**2,055,165**	**3,237,791**	**2,833**	**8,273**	**11,106**	**1·14**	**0·68**	**0·80**
1938	**1,222,359**	**2,119,210**	**3,341,569**	**2,854**	**8,341**	**11,195**	**1·17**	**0·70**	**0·82**

[1] "Farm" population refers to that part of the population located on farms where milk is produced; "Non-Farm" population includes the total urban population, plus that part of the rural population located on farms where there are no milk cows. In other words, the former group is composed of milk producers while the latter is composed of milk buyers.

Subsection 5.—Horticulture.

The statistical treatment of horticulture is confined to fruit growing, vegetable growing, floriculture, and nursery stock production, all on a commercial scale. Of the several branches of commercial horticulture, fruit and vegetable growing are the most important. In recent years the latter has made remarkable gains and now surpasses fruit growing in total value of production. Vegetables and flowers grown in home gardens for private use probably exceed the volume of commercial production. The processing of fruits and vegetables is an important development closely allied to the production industry. In 1937, the latest year for which complete figures are available, the total value of processed fruits and vegetables, including wine, was almost $54,000,000.

Apple growing is the mainstay of the fruit industry in Canada, the value of commercial production averaging over $10,000,000 annually for the years 1926-35. Other fruits cultivated include the pear, peach, plum, cherry, apricot, and grape, together with various berries of which the strawberry is most important. Substantial revenue is derived from the native blueberry and cranberry, the former being abundant over large areas of Eastern Canada, while the cranberry is found chiefly in the Maritime Provinces. Commercial fruit growing is centred mainly in the provinces of Nova Scotia, Ontario, and British Columbia. For a fuller discussion of fruit growing in Canada, the reader is referred to pp. 242-247 of the 1931 edition of the Year Book.

Satisfactory annual statistics of the commercial vegetable-growing industry are not at present available, but important information on the subject is obtained through the decennial census. This material will be found on pp. 254-255 of the 1936 Year Book.

Annual Statistics of Fruit Production.—Table 24 shows the quantities and values of commercial fruit production in Canada for the years 1934-37, inclusive, together with the averages for the five-year period 1932-36.

24.—Estimated Quantities and Values of Chief Commercial Fruit Production in Canada, 1934-37, with Five-Year Averages, 1932-36.

Note.—Figures for the years 1926-33 will be found at pp. 258-259 of the 1937 Year Book.

Kind of Fruit.		1934.	1935.	1936.	1937.	Average, 1932-36.
Apples	bbl.	4,354,400	4,499,900	4,115,200	5,153,800	4,489,200
	$	9,424,400	11,581,000	9,799,800	11,110,200	9,733,300
Pears	bu.	446,800	476,100	431,300	457,700	456,000
	$	598,200	641,300	601,300	634,500	544,300
Peaches	bu.	443,800	619,600	429,900	664,800	630,000
	$	1,033,600	907,600	975,500	1,035,900	995,700
Apricots	bu.	100,800	33,300	1,300	52,700	45,100
	$	246,000	90,000	4,100	122,000	115,200
Plums and prunes	bu.	240,200	263,100	158,700	199,400	230,400
	$	371,000	356,900	243,200	283,200	294,100
Cherries	bu.	194,700	213,300	186,800	153,000	221,500
	$	557,900	556,500	480,400	513,600	522,100
Strawberries	qt.	20,242,300	27,505,800	20,578,600	23,424,100	22,238,000
	$	1,968,600	2,352,000	1,930,700	2,170,500	1,921,800
Raspberries	qt.	5,835,200	8,140,200	5,651,600	8,589,800	6,648,300
	$	824,400	1,041,200	704,100	957,200	821,400
Loganberries	lb.	2,333,400	2,186,000	1,247,400	1,540,000	1,966,300
	$	108,300	108,700	68,600	97,500	90,200
Grapes	lb.	48,565,000	42,945,500	22,915,000	54,384,800	41,321,100
	$	987,100	668,600	491,300	1,120,400	699,100
Totals	$	**16,119,500**	**18,303,800**	**15,299,000**	**18,045,000**	**15,737,200**

The Fruit Nursery Industry.—The first commercial nursery in Canada was established near Fonthill, Ontario, and this district still continues to be one of the leading centres of the industry. While the province of Ontario accounts for the major part of the fruit stock output, there are nurseries distributed through all the provinces and the wholesale value of the product sold during the year ended May 31, 1938, was $369,458, as compared with $373,002 in 1937.

25.—Numbers and Values of Fruit Trees, Bushes, and Plants Sold by Nurserymen in Canada, years ended May 31, 1935-38.

Kind of Tree, Bush, or Plant.	Numbers Sold.				Values.			
	1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.
					$	$	$	$
Apple—								
Early	62,929	82,063	68,725	64,376	24,156	32,115	26,422	24,978
Fall	72,212	95,710	70,963[1]	74,679	27,024	36,365	27,915[1]	29,975
Winter	209,873	256,959	257,615	285,907	72,970	97,104	96,682	107,599
Crab	9,906	12,633	15,675	16,225	3,531	4,226	4,682	4,566
Totals, Apple	354,920	447,365	412,978[1]	441,187	127,681	169,810	155,701[1]	167,118
Crab seedlings	[2]	[2]	[2]	6,000	–	136	–	120
Root grafts	[2]	[2]	22,000	35,000	–	–	[2]	1,225
Pear	60,497	66,156	84,357	96,276	26,762	26,635	34,529	37,159
Pear grafts	[2]	[2]	3,500	2,500	–	–	[2]	100
Plum	56,740	62,893	76,974	97,369	23,472	24,870	28,984	34,088
Plum seedlings	[2]	[2]	[2]	16,000	–	–	–	515
Peach	112,990	204,099	201,271	159,295	26,496	45,884	48,220	35,414
Cherry	57,758	64,352	71,230	70,975	26,276	28,696	30,564	28,057
Cherry seedlings	[2]	[2]	[2]	2,000	–	–	–	120
Apricot	4,169	5,357	4,724	5,532	988	1,721	1,478	1,592
Nectarine	46	103	47	70	23	43	17	25
Quince	87	776	283	383	44	331	136	169
Blackberry	43,062	56,576	19,601	24,428	1,810	1,801	802	1,227
Currant	60,013	88,343	74,554	85,882	6,147	8,399	6,395	7,116
Grape	168,724	128,004	174,036	168,187	17,257	11,742	13,611	13,817
Gooseberry	31,529	35,408	39,467	40,562	4,361	5,116	4,996	4,894
Raspberry	948,618	1,145,221	826,189	765,741	33,246	30,880	26,115	21,890
Loganberry	3,304	2,506	805	1,637	234	85	48	128
Strawberry	1,683,451	1,971,282	3,315,142	2,381,494	13,815	13,678	21,406	14,684
Totals	–	–	–	–	**308,612**	**369,827**	**373,002**[3]	**369,458**

[1] Revised since the publication of the 1938 Year Book. [2] Not available. [3] Does not include values of 22,000 root grafts and 3,500 pear grafts which are not available.

Floriculture.—The total value of floriculture and ornamental nursery stock sold in Canada during the years ended May 31, 1937 and 1938, was $3,138,126 and $2,976,940, respectively, as shown by Table 26. The figures for 1937 and 1938 are more representative than are those collected for earlier years.

26.—Quantities and Values of Floricultural and Ornamental Nursery Stock Grown in Canada and Sold during the years ended May 31, 1937 and 1938.

Description.	1937.		1938.	
	Quantity Sold.	Total Wholesale Value.	Quantity Sold.	Total Wholesale Value.
	No.	$	No.	$
Rose bushes, outdoor	518,016	110,542	481,146	92,544
Ornamental shrubs, outdoor	1,046,976	101,661	876,250	117,314
Ornamental trees, deciduous	154,982	57,913	179,952	49,724
Ornamental trees, evergreen	115,354	151,411	104,863	116,689
Ornamental climbers, outdoor	30,287	7,848	37,759	9,029
Herbaceous perennials	526,176	60,856	533,554	56,756
Herbaceous biennials	44,821	3,454	96,459	3,393
Bedding plants	8,850,977	207,681	8,294,810	197,907
Flowering plants for indoor use	661,925	302,044	700,066	306,845
Foliage and decorative plants for indoor use	268,037	69,013	258,716	66,340
Flowering bulbs	2,981,433	66,424	2,005,311	56,522
Cut flowers, grown inside	51,136,619	1,952,128	48,405,432	1,849,702
Cut flowers, grown outdoors	2,841,242	47,151	3,588,213	54,175
Totals	–	**3,138,126**	–	**2,976,940**

Vegetables.—Census figures of areas, quantities, and values of vegetables produced for sale on farms in Canada, in the years 1920 and 1930, were shown at pp. 254-255 of the 1936 Year Book.

Subsection 6.—Special Agricultural Crops.

Maple Syrup and Sugar.—The Canada Year Book, 1924, contained on pp. 247-248 a description of the process of making maple sugar. Table **27** gives the production and value of maple sugar and syrup in Canada for the years 1936-38, as estimated by the Dominion Bureau of Statistics.

The table shows that in 1938 for the whole of Canada there was an estimated decrease of 959,200 lb. of maple sugar but an increase of 1,723,200 gal. of maple syrup, while the combined value of the two products showed an increase of $1,604,900 as compared with the previous year.

27.—Estimated Quantities and Values of Maple Sugar and Maple Syrup Produced in Canada, by Provinces, 1936-38.

Province and Year.	Maple Sugar.			Maple Syrup.			Total Value of Sugar and Syrup.
	Quantity.	Average Price per Pound	Value.	Quantity.	Average Price per Gallon.	Value.	
	lb.	cts.	$	gal.	$	$	$
Nova Scotia.....1936	56,600	21	11,900	5,200	2·44	12,700	24,600
1937	45,200	25	11,300	6,800	2·14	14,300	25,600
1938	44,600	23	10,300	7,400	1·81	13,400	23,700
New Brunswick..1936	131,500	21	27,600	11,200	1·67	18,700	46,300
1937	116,500	19	22,100	5,600	1·74	9,700	31,800
1938	118,200	21	24,800	23,300	1·63	37,900	62,700
Quebec..........1936	8,506,000	10·9	927,200	1,387,900	1·12	1,554,500	2,481,700
1937	4,020,000	11	442,200	780,000	1·11	865,800	1,308,000
1938	3,212,100	10	321,200	2,353,800	1·10	2,589,100	2,910,300
Ontario..........1936	537,700	17	91,400	618,400	1·73	1,069,800	1,161,200
1937	231,400	21	48,600	439,700	1·89	831,000	879,600
1938	79,000	18	14,200	570,800	1·47	839,000	853,200
Canada.........1936	**9,231,800**	**11**	**1,058,100**	**2,022,700**	**1·31**	**2,655,700**	**3,713,800**
1937	**4,413,100**	**12**	**524,200**	**1,232,100**	**1·40**	**1,720,800**	**2,245,000**
1938	**3,453,900**	**10**	**370,500**	**2,955,300**	**1·18**	**3,479,400**	**3,849,900**

Sugar Beets and Beetroot Sugar.—A brief account of the development of the beetroot sugar industry in Canada will be found in the Canada Year Book, 1925, pp. 255-256. At the present time two companies are operating in Canada: the Canada and Dominion Sugar Co., Ltd., with factories at Chatham and Wallaceburg in Ontario, and the Canadian Sugar Factories, Ltd., with plants at Raymond, and Picture Butte, Alberta. Table **28** shows the areas, yields, and values of sugar beets grown in Canada in the years 1928-37.

28.—Acreages, Yields, and Values of Sugar Beets Grown in Canada and Quantities of Refined Beetroot Sugar Produced, 1928-37.

Note.—For the years 1911-20, see the 1932 Year Book, p. 1057; for 1921-27, see the 1933 Year Book, p. 257.

Year.	Sugar Beets.					Quantity and Value of Refined Beetroot Sugar Produced.		
	Area Grown.	Yield per Acre.	Total Yield.	Average Price per Ton.	Total Value.			
	acres.	tons.	tons.	$	$	lb.	$	cts. per lb.
1928...........	34,323	7·14	244,930	8·33	2,041,465	64,653,348	3,340,571	5·2
1929...........	32,556	7·23	235,465	8·84	2,080,996	69,399,213	3,335,344	4·8
1930...........	40,532	9·80	397,576	8·25	3,278,625	94,624,700	4,529,944	4·8
1931...........	43,337	10·06	435,992	7·32	3,190,198	107,139,129	4,794,551	4·5
1932...........	44,817	11·28	505,671	6·16	3,113,942	132,016,859	5,789,205	4·4
1933...........	43,807	10·10	442,391	6·31	2,790,929	131,392,501	5,713,181	4·4
1934...........	38,495	10·72	412,672	6·30	2,599,982	114,002,950	4,714,625	4·1
1935...........	51,985	8·83[1]	459,223	6·27	2,881,098	119,857,668	4,617,733	3·9
1936...........	52,748	10·54	555,969	6·31	3,510,922	156,066,242	6,103,264	3·9
1937...........	46,669	9·05	422,152	6·69	2,825,006	120,440,235	5,230,971	4·3

The production in 1936-37 of raw beet sugar in the principal beet-growing countries, in thousands of short tons, was as follows: U.S.S.R., 2,203; Germany, 1,992; United States, 1,396; France, 960; Czechoslovakia, 801; United Kingdom, 650; Poland, 505; Italy, 380; Sweden, 330; Belgium, 266; Netherlands, 259; Denmark, 249; Spain, 249; Austria, 161; Hungary, 158; Yugoslavia, 110; Irish Free State, 107.

Tobacco.—The 1938 commercial crop of Canadian leaf tobacco is estimated at 98,427,900 lb., the largest crop on record in the history of the industry. This represents an increase of 26,334,500 lb. over the 1937 crop estimated at 72,093,400 lb. and is more than double the average production of the ten-year period 1927-1936.

The rapid expansion in the industry has been due almost entirely to the phenomenal increase in the production of flue-cured tobacco, particularly in Ontario where production of this type increased from 6,229,800 lb. grown on 7,550 acres in 1927 to 73,500,000 lb. on 61,500 acres in 1938. On the other hand, burley tobacco has shown wide fluctuations during the same period with production in 1938 amounting to only 10,657,700 lb. as compared with the peak production of 22,385,000 lb. in 1927.

The 1938 crop has a gross farm value estimated at $19,563,000 as compared with $17,139,200 in 1937 and $9,374,100 in 1936. The values used in these estimates are based on average farm prices. As a result of unfavourable marketing conditions and a sharp break in prices in 1931 values reached very low levels in 1932. Prices rose steadily during the next five years, partly as the result of increased prices for all types of tobacco but particularly due to the rapid expansion in the production of flue-cured tobacco, which commands a higher price than other types. Owing to the very large crop in 1938 and high stocks on hand from the heavy production in the previous year, prices paid for the 1938 crop were generally lower than the corresponding prices in 1937.

29.—Acreage, Production, and Value of the Commercial Crop of Leaf Tobacco in Canada, representative years, 1900-38.

Year.	Planted Area.	Average Yield.	Total Production.	Average Farm Price.	Gross Farm Value.
	acres.	lb. per acre.	lb.	cts. per lb.	$
1900[1]	11,906	946	11,267,000	[2]	[2]
1910[1]	18,928	931	17,632,000	[2]	[2]
1913	11,000	1,136	12,500,000	[2]	[2]
1914	9,750	1,026	10,000,000	[2]	[2]
1916	5,891	1,008	5,943,000	[2]	[2]
1917	7,930	1,071	8,495,000	[2]	[2]
1918	13,403	1,062	14,232,000	[2]	[2]
1919	31,586	1,069	33,770,000	46·0	15,548,000
1920	53,114	905	48,088,500	12·3	5,893,275
1921	11,809	1,122	13,249,000	18·0	2,393,190
1922	25,762	1,007	25,947,600	17·0	4,547,851
1923	23,932	890	21,297,000	16·0	3,518,500
1924	21,317	878	18,710,700	23·3	4,358,900
1925	27,825	1,052	29,266,000	23·9	7,004,600
1927	44,028	995	43,828,700	20·5	8,978,500
1928	43,138	973	41,955,800	16·2	6,811,800
1930	41,444	886	36,716,400	19·5	7,163,000
1931	54,936	933	51,248,400	13·9	7,105,200
1932	53,966	1,000	53,987,000	11·5	6,178,200
1934	40,962	946	38,734,900	18·6	7,218,300
1935	47,117	1,177	55,470,400	19·6	10,870,100
1936	54,993	839	46,116,300	20·3	9,374,100
1937	69,028	1,044	72,093,400	23·8	17,140,200
1938	83,745	1,175	98,427,900	19·9	19,563,000

[1] Census returns which include total tobacco crop. [2] Not available.

30.—Acreage, Production, and Value of the Commercial Crop of Leaf Tobacco in Canada, by Provinces, 1934-38.

Year.	Quebec.			Ontario.			British Columbia.		
	Planted Area.	Production.	Value.	Planted Area.	Production.	Value.	Planted Area.	Production.	Value.
	acres.	'000 lb.	$	acres.	'000 lb.	$	acres.	'000 lb.	$
1934..........	8,175	7,070	831,600	32,329	31,400	6,337,500	458	265	49,200
1935..........	5,425	5,965	641,400	41,675	49,490	10,226,300	17	16	2,400
1936..........	8,678	9,111	844,800	46,191	36,883	8,504,900	124	122	24,300
1937..........	7,734	8,678	1,098,500	60,819	63,026	15,964,700	475	389	77,000
1938..........	9,950	10,875	1,206,500	73,415	87,158	18,293,300	380	395	63,200

31.—Acreage, Production, and Value of the Commercial Crop of Leaf Tobacco, in Canada, By Main Types, 1937-38, With Five-Year Averages 1932-1936.

Description.	Year.	Planted Area.	Average Yield per Acre.	Total Production.	Average Farm Price.	Gross Farm Value.
		acres.	lb.	lb.	cts. per lb.	$
Flue-cured—						
Average................	1932-1936	30,028	912	27,391,700	22·7	6,224,100
	1937	53,347	1,038	55,374,000	27·3	15,107,600
	1938	63,730	1,183	75,395,200	22·4	16,885,700
Burley—						
Average................	1932-1936	10,163	1,093	11,104,500	9·5	1,057,200
	1937	6,170	1,032	6,371,400	13·3	844,200
	1938	9,215	1,156	10,657,700	13·8	1,470,800
Cigar Leaf—						
Average................	1932-1936	3,781	992	3,748,900	8·2	305,900
	1937	4,827	1,212	5,852,000	12·5	731,500
	1938	5,065	1,225	6,200,000	9·9	616,000

Flax Fibre.—Table 32, compiled from information furnished by the Economic Fibre Division of the Dominion Experimental Farms, shows the areas, production, and values of flax fibre and allied products in Canada for each of the years 1929 to 1938.

32.—Acreages, Yields, and Values of Flaxseed, Fibre, and Tow in Canada, 1929-38.

Note.—Figures for the years 1915 to 1928 will be found at p. 284 of the 1934-35 Year Book.

Year.	Area.	Production.			Values.			
		Seed.	Fibre.	Tow.	Seed.	Fibre.	Tow.	Total.
	acres.	bu.	lb.	tons.	$	$	$	$
1929...............	6,280	32,970	Nil	4,500	156,607	-	236,250	392,857
1930...............	6,143	62,232	“	6,086	96,684	-	273,870	370,554
1931...............	4,220	35,870	25,000	3,019	53,805	4,000	120,760	178,565
1932...............	5,135	35,945	200,000	3,552	56,156	18,000	95,964	170,120
1933...............	5,091	30,546	Nil	3,055	65,227	-	96,233	161,460
1934...............	5,965	41,755	45,000	4,361	128,268	7,200	114,450	249,918
1935...............	6,200	37,200	90,000	5,950	142,800	16,200	162,250	321,250
1936...............	6,242	31,210	635,100	3,094	106,185	114,318	77,350	297,853
1937...............	7,907	39,535	1,368,600	2,654	40,220	211,880	79,620	331,720
1938...............	10,225	77,992	2,662,000	2,246	189,752	241,850	87,000	518,602

Apiculture.—Data on apicultural production are shown by provinces for the years 1936 and 1937 in Table 33. Numbers of beekeepers and colonies, and the production estimates for honey and beeswax have been furnished for the most part by the Provincial Departments of Agriculture. Crop valuations have been made on the basis of the average farm prices reported by the Bureau's crop correspondents. Production in 1937 showed a decrease of 23 p.c. in both volume and value as compared with the crop of the previous year. An estimate of the 1938 honey crop places production at 37,278,900 lb., the highest on record.

33.—Estimated Production and Value of Honey and Beeswax in Canada, by Provinces, 1936 and 1937.

Note.—Figures of honey production, as at the Censuses of 1921 and 1931 will be found at p. 285 of the 1934-35 Year Book.

Province and Year.	Bee-keepers.	Hives.	Honey.				Beeswax.		Total Value, Honey and Wax.
			Average Yield per Hive.	Total Production.	Average Price per lb.	Total Value.	Production.	Value.	
	No.	No.	lb.	lb.	cts.	$	lb.	$	$
Prince Edward Island......1936	[1]	330	42·2	14,000	14·0	1,950	200	50	2,000
1937	[1]	400	40·0	16,150	12·0	1,950	250	70	2,020
Nova Scotia......1936	240	1,250	42·2	52,750	17·0	9,000	1,600	500	9,500
1937	240	1,250	40·0	50,000	16·0	8,000	1,800	400	8,400
New Brunswick..1936	180	600	83·3	50,000	18·0	9,000	750	200	9,200
1937	470	1,000	80·0	80,000	18·0	14,400	1,200	350	14,750
Quebec.......1936	6,800	71,500	75·3	5,395,550	10·0	539,600	69,400	18,000	557,600
1937	7,300	69,800	49·0	3,589,000	10·0	358,900	52,800	14,300	373,200
Ontario.......1936	8,200	195,000	46·0	8,970,000	10·0	897,000	110,200	30,850	927,850
1937	8,100	204,000	32·0	6,520,000	10·0	652,000	81,250	23,550	675,550
Manitoba.....1936	3,450	51,300	158·6	8,135,500	9·0	732,200	82,000	16,400	748,600
1937	3,550	55,200	122·0	6,748,550	9·0	607,400	67,500	16,900	624,300
Saskatchewan.....1936	3,000	17,100	155·1	2,636,300	11·0	290,000	39,500	10,700	300,700
1937	3,900	23,700	48·2	1,142,550	11·0	125,700	17,100	4,800	130,500
Alberta.......1936	1,150	12,200	152·0	1,850,000	11·0	203,500	27,750	7,500	211,000
1937	1,250	14,000	154·7	2,160,000	10·0	216,000	32,400	9,100	225,100
British Columbia...1936	3,080	21,000	53·7	1,129,700	15·0	169,450	11,300	2,800	172,250
1937	3,080	21,000	67·8	1,427,000	15·0	214,050	14,300	4,300	218,350
Totals........1936	[1]	**370,280**	**76·2**	**28,233,800**	**10·1**	**2,851,700**	**342,700**	**87,000**	**2,938,700**
1937	[1]	**390,350**	**55·7**	**21,733,250**	**10·1**	**2,198,400**	**268,600**	**73,770**	**2,272,170**

[1] Information not available.

Subsection 7.—Farm Labour and Wages.

Average Wages of Farm Help.—The cost of farm labour reached its highest point in 1920. In the next two years there was a rapid drop, while from 1923 until 1929 there was little change. The years 1930 to 1933 showed continuous marked reductions in average values of yearly wages and board, following the downward trend of the prices of farm produce. From 1934 to 1938 slight increases were registered.

In Table 34 the values of wages and board are given for the years 1914, 1920, 1930, and 1936-38, both for the summer season and for the year, distinction being made in all cases between wages and board.

34.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1936-38.

NOTE.—M = Males. F = Females.

Province.	Year.	Per Month in Summer Season.						Per Year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		$	$	$	$	$	$	$	$	$	$	$	$
Canada	**1914**	**22**	**8**	**14**	**11**	**36**	**19**	**155**	**57**	**168**	**132**	**323**	**189**
	1920	**60**	**27**	**26**	**20**	**86**	**47**	**543**	**275**	**278**	**217**	**821**	**492**
	1930	**34**	**20**	**22**	**18**	**56**	**38**	**326**	**210**	**233**	**199**	**559**	**409**
	1936	**21**	**11**	**16**	**13**	**37**	**24**	**206**	**126**	**168**	**135**	**374**	**261**
	1937	**23**	**12**	**17**	**13**	**40**	**25**	**224**	**134**	**176**	**138**	**400**	**272**
	1938	**24**	**12**	**17**	**13**	**41**	**25**	**230**	**135**	**175**	**140**	**405**	**275**
P. E. Island	1914	15	5	10	8	25	13	101	40	120	96	221	136
	1920	42	18	18	14	60	32	371	212	201	160	572	372
	1930	32	16	18	14	50	30	308	179	205	165	513	344
	1936	18	11	13	11	31	22	190	126	161	136	351	262
	1937	21	11	15	13	36	24	206	125	168	127	374	252
	1938	20	10	13	11	33	21	205	130	159	130	364	260
Nova Scotia	1914	20	7	11	8	31	15	169	59	132	96	301	155
	1920	49	21	24	17	73	38	472	218	263	190	735	408
	1930	34	17	20	14	54	31	353	187	209	157	562	344
	1936	22	12	15	11	37	23	245	136	170	124	415	260
	1937	25	12	15	11	40	23	262	145	173	127	435	272
	1938	25	11	16	12	41	23	269	145	170	132	439	277
New Brunswick	1914	21	7	11	8	32	15	170	69	132	96	302	165
	1920	56	19	23	16	79	35	531	213	254	178	785	391
	1930	34	16	20	15	54	31	335	181	215	164	550	345
	1936	25	11	15	11	40	22	257	117	141	101	398	218
	1937	28	12	16	12	44	24	295	133	147	115	442	248
	1938	26	12	15	11	41	23	280	128	152	119	432	247
Quebec	1914	21	7	13	9	34	16	140	44	156	108	296	152
	1920	62	24	24	16	86	40	524	235	243	172	767	407
	1930	33	17	19	13	52	30	316	175	194	139	510	314
	1936	19	10	13	10	32	20	196	106	136	100	332	206
	1937	25	12	15	11	40	23	226	121	150	111	376	232
	1938	24	11	14	11	38	22	247	122	151	113	398	235
Ontario	1914	19	7	13	10	32	17	141	52	156	120	297	172
	1920	52	25	23	19	75	44	474	259	262	211	736	470
	1930	31	21	20	17	51	38	304	229	228	194	532	423
	1936	21	13	16	14	37	27	211	147	177	148	388	295
	1937	25	14	18	15	43	29	235	158	186	154	421	312
	1938	24	15	18	15	42	30	228	152	183	151	411	303
Manitoba	1914	24	9	15	13	39	22	184	70	180	156	364	226
	1920	70	34	28	24	98	58	650	312	325	247	975	559
	1930	32	18	21	18	53	36	298	194	238	204	536	398
	1936	19	9	15	13	34	22	178	103	158	132	336	235
	1937	21	10	16	13	37	23	202	113	165	136	367	249
	1938	23	11	16	13	39	24	207	116	166	136	373	252
Saskatchewan	1914	24	9	17	14	41	23	162	67	204	168	366	235
	1920	72	35	30	25	102	60	667	364	336	289	1,003	653
	1930	37	21	23	19	60	40	340	215	253	212	593	427
	1936	19	9	16	13	35	22	188	105	158	133	346	238
	1937	19	10	16	13	35	23	184	106	160	127	344	233
	1938	22	10	15	13	37	23	203	113	160	134	363	247
Alberta	1914	24	10	16	14	40	24	173	68	192	168	365	236
	1920	76	36	31	26	107	62	697	360	341	278	1,038	638
	1930	37	21	23	20	60	41	342	223	256	222	598	445
	1936	22	11	16	14	38	25	206	125	172	146	378	271
	1937	23	12	17	15	40	27	221	131	180	151	401	282
	1938	25	12	18	15	43	27	237	137	181	152	418	289

34.—Average Wages and Board of Farm Help in Canada, as Estimated by Crop Correspondents, 1914, 1920, 1930, and 1936-38—concluded.

Province.	Year.	Per Month in Summer Season.						Per Year.					
		Wages.		Board.		Wages and Board.		Wages.		Board.		Wages and Board.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
		$	$	$	$	$	$	$	$	$	$	$	$
British Columbia......	1914	27	13	21	18	48	31	208	108	252	216	460	324
	1920	64	36	31	27	95	63	684	431	349	311	1,033	742
	1930	46	25	26	21	72	46	450	270	291	242	741	512
	1936	25	15	21	17	46	32	265	166	229	192	494	358
	1937	28	17	21	18	49	35	279	170	234	193	513	363
	1938	28	16	22	19	50	35	284	170	238	195	522	365

Subsection 8.—Prices of Agricultural Produce.

The average monthly cash prices of representative grades of Canadian wheat, oats, barley, flaxseed, and rye in the Winnipeg market—basis, in store at Fort William and Port Arthur—will be found for each month from August, 1936, to December, 1938, in Table **35**. The average monthly prices of flour, bran, and shorts at Montreal, Toronto, Winnipeg, Minneapolis, and Duluth for 1938 are given in Table **36**.

The yearly average prices per cwt. of Canadian live stock at Toronto, Montreal, Winnipeg, and Edmonton are given for 1937 and 1938 in Table **37** and the average monthly prices in 1938 at these centres and at Calgary in Table **38**.

35.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis, in Store at Fort William and Port Arthur—Aug., 1936-Dec., 1938, and Yearly Average Prices for crop years ended July 31, 1926-38.

Year and Month.	Wheat, No. 1 N.	Oats, No. 2 C.W.	Barley, No. 3 C.W.	Flaxseed, No. 1 C.W.	Rye, No. 2 C.W.
	cts.	cts.	cts.	cts.	cts.
Averages, crop year ended July, 1926...	**151·2**	**49·6**	**63·9**	**213·8**	**89·8**
Averages, crop year ended July, 1927...	**146·2**	**58·8**	**72·7**	**195·0**	**99·7**
Averages, crop year ended July, 1928...	**146·3**	**65·2**	**85·3**	**189·9**	**129·9**
Averages, crop year ended July, 1929...	**124·0**	**58·8**	**71·4**	**202·2**	**100·7**
Averages, crop year ended July, 1930...	**124·2**	**58·6**	**60·0**	**247·5**	**80·2**
Averages, crop year ended July, 1931...	**64·2**	**29·9**	**28·4**	**114·1**	**34·7**
Averages, crop year ended July, 1932...	**59·8**	**31·4**	**37·3**	**93·7**	**40·0**
Averages, crop year ended July, 1933...	**54·3**	**26·4**	**32·3**	**90·6**	**37·8**
Averages, crop year ended July, 1934...	**68·1**	**33·9**	**38·8**	**148·0**	**47·5**
Averages, crop year ended July ,1935...	**81·9**	**42·8**	**48·2**	**138·6**	**52·9**
Averages, crop year ended July, 1936...	**84·6**	**34·5**	**37·0**	**147·6**	**42·7**
1936.					
August..................................	102·3	49·5	59·9	177·4	67·1
September..............................	103·9	44·9	58·9	167·6	68·0
October.................................	110·9	44·4	61·0	163·6	69·8
November...............................	108·5	45·3	61·9	159·3	78·4
December...............................	120·3	50·0	76·4	167·6	96·6
1937.					
January.................................	124·7	54·5	83·8	169·5	103·1
February...............................	127·0	55·0	83·3	170·0	104·8
March....................................	135·6	56·4	81·4	178·9	107·0
April......................................	138·9	58·8	74·8	182·3	113·5
May.......................................	130·6	56·3	71·1	172·6	114·4
June......................................	124·1	57·1	66·0	165·6	116·1
July.......................................	145·6	63·6	71·9	180·0	147·3
Averages, crop year ended July, 1937...	**122·7**	**53·0**	**70·9**	**171·2**	**98·8**
August..................................	131·8	50·9	58·3	173·3	87·5
September..............................	133·6	52·0	59·3	175·9	89·5
October.................................	142·3	53·4	62·1	178·0	84·5
November...............................	134·6	47·5	58·6	174·0	73·8
December...............................	137·4	49·5	57·3	170·1	75·3

35.—Monthly Average Cash Prices per Bushel at Winnipeg of Representative Grades of Canadian Wheat, Oats, Barley, Flaxseed, and Rye—basis, in Store at Fort William and Port Arthur—Aug., 1936-Dec., 1938, and Yearly Average Prices for crop years ended July 31, 1926-38—concluded.

Year and Month.	Wheat, No. 1 N.	Oats, No. 2 C.W.	Barley, No. 3 C.W.	Flaxseed, No. 1 C. W.	Rye, No. 2 C.W.
	cts.	cts.	cts.	cts.	cts.
1938.					
January	149·1	56·5	61·8	176·5	81·6
February	144·6	56·8	63·9	173·6	82·1
March	138·4	52·1	59·1	162·9	72·8
April	138·8	50·3	55·5	152·4	63·0
May	115·3	49·0	56·3	147·5	57·3
June	114·3	45·5	53·3	142·9	53·0
July	98·4	41·3	46·6	144·5	48·3
Averages, crop year ended July, 1938	**131·6**	**50·4**	**57·7**	**164·3**	**72·4**
August	76·6	31·3	38·0	141·4	39·9
September	63·4	29·5	34·3	135·0	39·6
October	61·5	28·1	35·9	132·8	41·0
November	59·0	28·3	34·4	135·8	38·8
December	60·6	28·5	35·8	144·4	39·8

36.—Monthly Average Prices of Flour, Bran, and Shorts at Principal Markets, 1938.

Sources: For Montreal, the *Gazette*; for Toronto, dealers' quotations; for Winnipeg and United States cities, the *Northwestern Miller*, Minneapolis.

Note.—The ton=2,000 lb. and the barrel=196 lb.

Month.	Montreal.				Toronto.			
	Flour, First Patents.[1]	Flour, Ontario, Delivered at Montreal.	Bran.	Shorts.	Flour, First Patents (Jute Bags).	Flour First Patents (Cotton Bags).	Bran.	Shorts.
	per bbl. $	per bbl. $	per ton. $	per ton. $	per bbl. $	per bbl. $	per ton. $	per ton. $
January	8·20	4·65	29·61	31·61	8·20	8·00	29·40	31·40
February	8·01	4·35	32·63	34·17	8·01	7·70	32·50	34·00
March	7·76	4·17	34·03	35·03	7·76	7·70	34·00	35·00
April	7·62	4·01	31·05	32·05	7·62	7·70	31·50	32·50
May	7·11	3·78	28·57	28·89	7·11	7·20	28·40	28·80
June	7·28	3·58	25·21	26·52	7·28	7·40	24·75	26·25
July	6·84	3·49	24·25	25·25	6·84	6·85	24·00	26·00
August	6·20	3·11	22·88	24·43	6·20	6·35	23·00	24·75
September	5·36	3·10	18·29	20·29	5·36	5·35	17·75	19·75
October	5·23	3·18	19·71	21·71	5·23	5·05	19·80	21·80
November	5·15	2·99	19·25	21·25	5·15	5·13	19·00	21·00
December	5·13	3·00	19·40	21·25	5·13	4·95	19·75	21·00

Month.	Winnipeg.			Minneapolis.			Duluth.
	Flour.	Bran.	Shorts.	Flour.	Bran.	Shorts.	Flour.
	per bbl. $	per ton. $	per ton. $	per bbl. $	per ton. $	per ton. $	per bbl. $
January	7·68	23·80	25·80	6·03–6·20	21·60–22·00	21·20–21·60	6·30–6·48
February	7·60	27·50	29·25	6·04–6·17	20·13–20·50	20·13–20·50	6·23–6·38
March	7·38	29·00	30·00	5·54–5·73	20·19–20·50	20·00–20·25	5·84–5·99
April	7·48	27·00	28·00	5·54–5·65	18·25–18·50	18·06–18·50	5·86–6·01
May	6·78	27·00	28·00	5·34–5·46	17·45–18·00	18·40–18·85	5·66–5·85
June	6·90	24·00	25·00	6·06–6·26	15·87–16·25	19·37–19·75	6·10–6·30
July	6·56	21·60	22·10	5·53–5·73	14·65–14·90	17·30–17·70	5·34–5·52
August	5·72	19·00	20·75	5·16–5·38	13·13–13·44	13·44–13·81	5·03–5·15
September	5·15	15·50	17·50	5·22–5·32	13·38–13·63	14·50–15·00	4·90–5·03
October	5·00	16·00	18·00	5·15–5·25	13·30–13·60	14·15–14·50	4·90–5·10
November	4·80	16·00	18·00	5·17–5·28	14·88–15·37	15·00–15·62	4·85–5·05
December	4·75	16·00	17·63	5·35–5·40	16·50	17·00–17·25	4·80–5·00

---

[1] Carload lots—Montreal rate points, which includes the Toronto district also.

37.—Yearly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1937 and 1938.

Source: Markets Intelligence Division, Live Stock Branch, Dominion Department of Agriculture.

Item.	Toronto.		Montreal.		Winnipeg.		Edmonton.	
	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.
Steers, up to 1,050 lb., good	6·72	5·97	7·62	6·41	6·12	5·25	6·50	5·37
Steers, up to 1,050 lb., medium	6·17	5·46	6·16	5·54	4·85	4·42	5·30	4·37
Steers, up to 1,050 lb., common	4·91	4·72	4·52	4·51	3·61	3·62	3·47	3·37
Steers, over 1,050 lb., good	7·40	6·27	7·61	6·53	6·25	5·29	6·41	5·28
Steers, over 1,050 lb., medium	7·05	5·73	6·22	5·54	4·92	4·48	5·16	4·39
Steers, over 1,050 lb., common	6·33	5·12	4·78	4·55	3·74	3·80	3·61	3·34
Heifers, good	6·47	5·78	5·79	5·26	4·73	4·61	4·77	4·53
Heifers, medium	5·92	5·36	4·81	4·52	3·69	3·86	3·73	3·75
Calves, fed, good	7·63	7·09	7·87	7·57	7·00	6·21	6·56	5·43
Calves, fed, medium	6·73	6·34	6·39	5·90	5·54	5·07	4·55	4·41
Calves, veal, good and choice	9·07	9·08	8·55	8·10	6·21	6·97	5·73	6·02
Calves, veal, common and medium	6·99	6·98	6·09	6·21	4·13	4·81	4·03	4·34
Cows, good	4·64	4·33	4·67	4·59	3·98	3·73	3·32	3·17
Cows, medium	4·08	3·82	3·95	3·89	3·08	3·06	2·62	2·71
Bulls, good	4·33	4·22	4·56	4·54	3·20	3·49	2·74	2·96
Stocker and feeder steers, good	5·34	5·14	[1]	[1]	4·33	4·31	3·68	3·58
Stocker and feeder steers, common	4·35	4·57	[1]	[1]	2·71	3·21	2·61	2·70
Stock cows and heifers, good	3·80	[1]	[1]	[1]	3·00	3·40	2·59	2·98
Stock cows and heifers, common	3·06	[1]	[1]	[1]	2·13	2·57	1·90	2·22
Hogs, select bacon	9·45	9·99	9·71	10·17	8·67	9·38	8·51	9·15
Hogs, bacon	8·92	9·45	9·21	9·66	8·15	8·88	8·02	8·60
Hogs, butchers	[1]	[2]	8·76	9·24	7·68	8·56	7·51	8·16
Hogs, heavies	[2]	[3]	8·71	9·48	7·78	8·59	7·02	7·63
Hogs, lights and feeders	[4]	[5]	8·48	9·82	7·03	9·00	6·11	6·98
Lambs, good handy weights	9·32	8·77	8·42	8·36	7·23	7·19	6·60	6·26
Lambs, common, all weights	7·44	7·19	7·02	6·69	5·27	5·65	4·53	4·37
Sheep, good handy weights	4·22	4·16	3·95	4·07	2·87	3·54	3·30	3·32

[1] No sales reported. [2] Bacon price less $1 per head. [3] Bacon price less $1·50 per head. [4] Bacon price less $2 per head January to November, and less $1·50 per head for December. [5] Bacon price less $2 per head.

38.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1938.

Market and Item.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	$	$	$	$	$	$	$	$	$	$	$	$
Montreal—												
Steers, up to 1,050 lb., good	6·23	5·70	6·09	6·44	6·81	7·36	7·03	6·79	6·17	5·62	6·02	6·47
Heifers, good	5·43	5·07	5·44	5·59	6·13	6·31	5·47	5·11	5·00	4·71	4·83	5·27
Calves, veal, good and choice	10·05	10·01	8·32	6·93	7·18	7·33	7·05	8·11	9·02	9·73	9·76	10·37
Hogs, bacon	9·07	9·46	10·38	10·57	10·61	11·26	12·15	10·02	9·57	8·53	8·44	9·28
Hogs, butchers	8·58	8·97	9·87	10·07	10·10	10·75	11·65	9·56	9·07	8·01	7·94	8·78
Lambs, good handy weights	7·60	7·92	8·86	[1]	[2]	11·41	9·43	8·36	7·94	7·75	7·90	8·90
Sheep, good handy weights	4·04	4·38	5·19	5·27	5·13	4·07	3·52	3·70	3·84	3·62	3·69	4·00
Toronto—												
Steers, up to 1,050 lb., good	5·40	5·06	5·56	6·05	6·55	7·16	6·53	6·19	5·70	5·23	5·58	6·06
Heifers, good	5·43	5·06	5·52	6·03	6·51	7·14	6·41	6·16	5·69	5·22	5·50	6·00
Calves, veal, good and choice	10·36	10·07	9·43	9·15	8·20	7·65	7·97	8·86	9·57	9·57	10·02	9·78
Hogs, bacon	8·56	9·02	9·87	9·94	10·22	10·92	11·94	9·66	9·15	8·01	8·10	9·12
Hogs, butchers	8·01	8·47	9·32	9·39	9·67	9·37	11·39	9·11	8·60	7·47	7·54	8·51
Lambs, good handy weights	7·99	8·31	9·11	9·59	10·37	11·41	10·84	8·80	8·06	7·64	7·93	9·10
Sheep, good handy weights	4·56	4·54	5·27	5·30	5·04	3·82	3·55	3·63	4·00	4·08	3·94	4·14

---

[1] Spring lambs, per head: April, $6·25-$7·50; May, $6·60-$6·75. [2] Spring lambs per head: $6·60-$6·75.

38.—Monthly Average Prices per Cwt. of Canadian Live Stock at Principal Markets, 1938—concluded.

Market and Item.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	$	$	$	$	$	$	$	$	$	$	$	$
Winnipeg—												
Steers, up to 1,050 lb., good	4·83	4·62	4·86	5·50	6·10	6·50	6·30	5·80	5·15	4·85	5·08	5·50
Heifers, good	4·28	4·24	4·56	4·96	5·64	5·63	5·38	5·01	4·56	4·20	4·46	4·86
Calves, veal, good and choice	8·30	7·79	7·24	7·10	6·78	6·18	6·08	6·84	7·26	6·66	7·45	8·38
Hogs, bacon	8·28	8·59	9·67	9·69	10·28	10·66	11·83	9·63	9·21	7·80	7·80	8·56
Hogs, butchers	7·76	8·10	9·18	9·19	9·81	10·18	11·28	9·19	8·69	7·30	7·31	8·07
Lambs, good handy weights	7·14	7·44	8·15	8·66	11·03	9·13	8·50	7·28	6·68	6·52	6·80	7·95
Sheep, good handy weights	2·63	3·00	3·00	3·50	3·64	4·38	3·74	3·26	3·25	3·25	3·25	3·29
Calgary—												
Steers, up to 1,050 lb., good	4·65	4·15	4·63	5·56	5·84	6·21	5·68	5·25	5·11	5·00	5·00	5·03
Heifers, good	4·00	4·03	4·45	5·09	5·32	5·33	5·00	4·75	4·31	4·10	4·05	4·32
Calves, veal, good and choice	5·16	6·61	7·26	7·50	6·65	5·53	5·58	5·60	5·62	5·40	4·93	5·84
Hogs, bacon	7·91	8·32	9·17	9·40	9·64	9·97	11·51	9·53	8·85	7·66	7·48	7·97
Hogs, butchers	7·40	7·82	8·66	8·91	9·16	9·47	11·05	9·02	8·36	7·21	6·98	7·46
Lambs, good handy weights	6·07	6·41	7·22	7·94	9·61	8·62	7·42	6·21	6·19	6·01	6·03	6·90
Sheep, good handy weights	3·25	3·20	3·49	4·03	6·74	5·13	4·00	3·43	3·50	3·50	3·50	3·50
Edmonton—												
Steers, up to 1,050 lb., good	4·91	4·30	4·91	5·45	5·91	6·40	6·01	5·22	4·58	4·55	4·53	5·25
Heifers, good	3·96	3·89	4·23	4·96	5·56	5·67	5·19	4·75	4·51	4·17	4·19	5·21
Calves, veal, good and choice	6·50	7·29	7·30	7·06	6·36	5·30	5·53	5·46	6·25	5·67	5·93	6·61
Hogs, bacon	7·99	8·27	9·22	9·29	9·67	9·96	11·37	9·06	8·78	7·54	7·55	8·05
Hogs, butchers	7·48	7·75	8·78	8·80	9·17	9·55	10·89	8·52	8·29	7·03	7·06	7·55
Lambs, good handy weights	6·08	6·49	7·51	8·56	8·26	8·45	7·03	6·19	5·78	5·69	5·35	6·56
Sheep, good handy weights	3·50	3·50	4·00	[1]	4·50	3·82	3·32	3·00	3·00	3·00	3·06	3·25

[1] No sales reported.

Index Numbers of Agricultural Prices.—Records of the average prices received by farmers for their crops have been collected annually since 1909 through the crop correspondents of the Census and Statistics Office or the Dominion Bureau of Statistics. From these records, annual index numbers of prices have been calculated for each crop and for the field crops as a whole. The results of these calculations using the crop year 1926-27 as the base period, are presented in Table **39**. In addition to the price indexes shown here, index numbers have been calculated of the yields of the various crops from year to year, and, by a combination of the prices and yields, index numbers of the value of all field crops, weighted according to quantities, have been obtained. Indexes of yield and value are not shown here, owing to lack of space, but appear at pp. 31-32 of the Monthly Bulletin of Agricultural Statistics, January, 1939.

39.—Index Numbers of Producers' Prices of Agricultural Commodities, for Canada, crop years, 1916-17 to 1938-39.

NOTE.—Average prices, 1926-27 = 100. For the formulæ used in the calculation, see Monthly Bulletin of Agricultural Statistics, January, 1939, p. 30.

Field Crop.	Average Price 1926.[1]	Index Numbers.										
		1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
	$											
Wheat	1·09	120·2	178·0	185·3	217·4	148·6	74·3	78·0	61·5	111·9	112·8	100·0
Oats	0·48	106·3	143·8	162·5	166·7	110·4	70·8	79·2	68·8	102·1	87·5	100·0
Barley	0·52	158·8	207·7	192·3	236·5	159·6	90·4	88·5	80·8	134·6	101·9	100·0
Rye	0·77	142·9	210·4	193·5	181·1	172·7	93·5	75·3	63·6	128·6	100·0	100·0
Peas	1·75	126·9	202·3	170·9	163·4	138·3	112·0	105·1	98·3	100·0	94·3	100·0
Beans	2·64	204·5	282·2	204·9	169·7	147·0	109·8	108·0	100·8	104·9	97·7	100·0
Buckwheat	0·87	123·0	167·8	181·6	172·4	147·1	102·3	96·6	96·6	102·3	97·7	100·0
Mixed grains	0·66	133·3	175·8	172·7	206·1	136·4	93·8	90·9	89·4	107·6	98·5	100·0
Flaxseed	1·62	125·9	163·6	193·2	254·9	119·8	88·9	106·2	109·3	119·8	114·2	100·0
Corn for husking	1·00	107·0	184·0	175·0	134·0	116·0	83·0	83·0	92·0	119·0	94·0	100·0
Potatoes	1·47	91·8	115·0	110·9	107·5	110·2	87·1	61·2	69·4	57·8	140·1	100·0
Turnips, etc	0·60	130·0	153·3	141·7	163·3	138·3	111·7	90·0	98·3	73·3	93·3	100·0
Hay and clover	12·13	95·6	85·2	134·0	170·8	215·2	194·2	111·0	90·4	91·3	85·3	100·0
Grain hay	10·11	[2]	[2]	[2]	286·8	327·6	[2]	127·3	34·3	91·5	91·5	100·0
Alfalfa	13·30	80·4	87·1	134·1	164·3	178·8	150·0	96·0	87·1	88·0	95·6	100·0
Fodder corn	4·88	100·8	105·3	126·0	141·8	158·8	144·5	101·8	94·7	104·9	82·6	100·0
Sugar beets	6·45	96·1	104·7	158·9	168·4	198·4	100·8	122·2	100·5	105·3	94·3	100·0
All Field Crops	–	**106·7**	**138·7**	**158·5**	**178·7**	**149·3**	**101·1**	**86·6**	**72·4**	**102·3**	**102·1**	**100·0**

Field Crop.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.[3]
Wheat	91·7	73·4	96·3	44·9	34·9	32·1	44·9	56·0	86·2	93·6	93·6	54·1
Oats	106·3	97·9	122·9	50·0	50·0	39·6	54·2	66·7	50·0	89·6	89·6	50·0
Barley	126·9	107·7	113·5	38·5	50·0	44·2	57·7	90·4	55·8	132·7	98·1	53·8
Rye	106·5	102·6	109·1	26·0	36·4	35·1	49·3	63·6	35·1	90·9	93·5	36·4
Peas	100·6	105·7	117·7	84·0	48·0	48·6	57·1	60·0	62·3	92·6	96·0	88·6
Beans	87·9	135·2	125·0	86·0	26·1	20·8	37·5	50·4	55·3	77·3	46·6	42·0
Buckwheat	102·3	106·9	108·0	74·7	57·5	49·4	57·5	60·9	58·6	81·6	82·8	67·8
Mixed grains	109·0	107·8	115·2	63·6	56·1	50·0	60·6	62·1	54·5	84·8	77·3	59·1
Flaxseed	95·7	98·1	146·9	58·0	48·8	38·3	74·1	71·0	73·5	88·9	91·4	70·4
Corn for husking	99·0	112·0	106·0	87·0	42·0	45·0	59·0	65·0	45·0	70·0	64·0	47·0
Potatoes	79·6	54·4	108·2	56·5	29·2	42·9	52·4	34·0	54·4	77·6	42·9	51·0
Turnips, etc	76·7	78·3	88·3	73·3	46·7	45·0	56·7	51·7	53·3	58·3	53·3	53·3
Hay and clover	85·8	85·5	96·0	81·0	62·8	58·5	72·3	96·9	62·8	63·1	62·1	57·4
Grain hay	100·0	99·7	95·0	66·6	60·6	58·8	67·9	70·4	60·5	63·4	61·6	43·2
Alfalfa	90·5	86·5	94·1	91·1	78·0	64·5	69·5	95·3	51·8	69·1	60·6	58·5
Fodder corn	91·6	96·1	106·2	101·0	81·4	56·4	67·2	84·4	68·0	69·3	63·1	57·6
Sugar beets	120·8	112·4	119·2	106·5	94·9	96·6	93·6	87·4	84·3	80·0	92·9	91·9
All Field Crops	**96·5**	**84·6**	**104·9**	**57·8**	**46·9**	**43·1**	**55·7**	**67·4**	**55·9**	**80·9**	**77·2**	**52·9**

[1] Prices quoted are per bushel, except for potatoes and turnips, etc., which are per cwt., and the last five items, which are per ton. For details of index numbers by provinces, see Monthly Bulletin of Agricultural Statistics, January, 1939, pp. 31-37. [2] Not available. [3] Subject to revision.

The general index number fell from 1924 to 1928, especially from 1926 to 1928, recovered strongly in 1929 but declined rapidly to reach the record low of 43·1 for the 1932 crops. All the crops contributed to this sharp decline, although the grain crops dependent upon overseas markets suffered the most. The forage crops and sugar beets, which are used within the country, held up well in price, partly owing to the fact that climatic conditions did not favour high yields in these years.

During the next two years there was considerable improvement in the prices of these field crops. Fodder and hay prices rose materially because of short crops and good demand. The general index rose from 43·1 in 1932 to 67·4 in 1934. The decline to 55·9 in 1935 was mainly due to increased production and consequent lower prices of coarse grains and forage crops, while sharply increased prices, especially for the grain crops, brought the index up to 80·9 for 1936, the highest point since 1929. Short crops due to severe drought in Western Canada brought the index down to 77·2 in 1937. Although production was heavy in 1938, a sharp decline in prices reduced the index still further to 52·9.

Subsection 9.—Agricultural Statistics of the Census.

A summary of the more important agricultural statistics compiled from the Census of 1931 was published at pp. 295-301 of the 1934-35 edition of the Year Book. The review included statistics of tenure of farms; farm values; mortgage indebtedness; farm expenditures; farm population; farm workers; and cost of labour, farm machinery, and facilities. In the 1937 edition of the Year Book, further statistics were presented at pp. 270-273 which showed, for the Prairie Provinces, comparative figures of population, farm holdings, areas, and values, the condition of farm land, the numbers of live stock, and the acreages of the principal crops, for each of the census years 1936, 1931, 1926, 1921, and 1911.

A summary table follows showing, by provinces, the part-time farm operators classified by the other occupations that are followed by some or all of the members of families, especially on small farms of insufficient size* to furnish a livelihood. Of such part-time operators, for Canada as a whole, 20·5 p.c. were, in 1931, either living on income or were following occupations not classified below; 19·8 p.c. of the remainder were engaged in unskilled labour; 11·6 p.c. in personal service; 11·5 p.c. in fishing, hunting and trapping; while other important occupations were agriculture (for others than themselves), construction, and transportation.

---

* The census definition of a "farm" is a tract of land of one acre or more which produces agricultural products to the value of $50 or more per annum.

40.—Occupations of Part-Time Farm Operators, 1931.

Item.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
Numbers Engaged In—										
Agriculture[1]	171	406	341	649	1,475	654	475	477	256	4,904
Fishing, hunting, and trapping	176	2,480	1,103	964	115	159	13	35	131	5,176
Logging	Nil	258	247	453	150	13	3	14	232	1,370
Mining, milling, quarrying, oil and salt wells.	"	461	55	94	168	20	17	116	182	1,113
Making wood products, pulp, paper and paper products	39	333	103	337	219	14	6	21	113	1,185
Building and construction (not including stone cutters)	101	1,113	495	945	1,188	139	86	137	430	4,634
Transportation and communications	97	968	541	661	1,242	246	132	231	417	4,535
Commercial occupations.	110	782	460	1,128	1,071	179	169	229	249	4,377
Professional occupations.	69	207	135	503	291	80	68	90	119	1,562
Personal service	132	1,389	759	744	1,307	225	127	155	382	5,220
Occupations connected with metals	60	373	234	463	676	63	40	65	125	2,099
Service as labourers and unskilled workers (not agricultural, mining or logging)	103	1,858	1,572	1,910	2,096	430	150	179	607	8,905
Totals, with classified occupations	1,058	10,628	6,045	8,851	9,998	2,222	1,286	1,749	3,243	45,080
Living on income	172	1,169	528	1,332	3,289	466	363	282	584	8,185
Other and unspecified occupations	85	428	286	903	1,133	100	78	113	313	3,439
Grand Totals	**1,315**	**12,225**	**6,859**	**11,086**	**14,420**	**2,788**	**1,727**	**2,144**	**4,140**	**56,704**

[1] Indicates farm labourers working for wages, who also operate small farms.

Subsection 10.—Miscellaneous Agricultural Statistics.

Agricultural Irrigation.—*Alberta.**—The surface waters in Alberta are vested in the Crown and are administered by the Water Resources Office under the Water Resources Act. All matters affecting the control of water supply generally, as well as the inspection and authorization of works for the use of water for domestic, municipal, industrial, irrigation, and other purposes, and the granting of licences for such purposes are dealt with thereunder. The Director of Water Resources at Edmonton is responsible for all field administration. The Irrigation Districts Act of Alberta (R.S.A., 1922, c. 114) and amending statutes provide for the formation of irrigation districts, and authorize the raising of loans under by-laws adopted by the voters of the district. Table **41** gives statistics of the larger irrigation projects in Alberta for the years 1936 and 1937.

41.—Major Irrigation Projects in Southern Alberta, 1936 and 1937.

Project.	Source of Supply.	1936.			1937.		
		Irrigable Area.	Length of Canals.	Area Irrigated.	Irrigable Area.	Length of Canals.	Area Irrigated.
		acres.	miles.	acres.	acres.	miles.	acres.
C.P.R. Western	Bow river	218,980	1,347	44,614	218,980	990	50,866
C.P.R. Lethbridge	St. Mary river	100,000	196	75,274	100,000	219	75,250
Canada Land	Bow river	130,000	453	24,453	130,000	466	32,567
Taber	St. Mary river	21,499	99	19,123	21,499	102	21,296
Lethbridge Northern	Oldman river	96,777	600	62,790	96,220	600	70,020
United	Belly river	34,166	175	18,000	34,166	175	17,500
New West	Bow river	4,563	24	2,207	4,563	24	2,752
Magrath	St. Mary river	6,975	90	4,000	6,975	90	4,000
Raymond	St. Mary river	15,130	16	13,000	15,130	16	13,000
Mountain View	Belly river	3,500	22	2,900	3,500	15	3,500
Little Bow	Highwood river	3,093	2·5	200	3.093	2·5	20
Eastern	Bow river	250,000	1,904	111,781	279,000	1,916	124,645

The Canadian Pacific Railway has constructed three large projects known as the Eastern, Western, and Lethbridge sections, the last-named being the oldest irrigation project in Alberta. In 1935 the interests of the C.P.R. in the Eastern project were transferred to the water contract holders, who are now operating under the name of the Eastern Irrigation District. By agreement with the Canadian Pacific Railway, the Taber, Magrath, and Raymond irrigation districts procure their water supply from the main canal of the Lethbridge section, a further 43,603 acres being served by the canals of these districts.

The total irrigable area served by the Canada Land and Irrigation Company's project is 130,000 acres, while the New West Irrigation District, by agreement with the Canada Land and Irrigation Company, received a water supply for a further irrigable area of 4,563 acres.

In addition to the irrigated tracts enumerated in the foregoing table, there are approximately 391 privately-owned projects in Alberta, with a possible irrigable area of 57,751 acres.

---

* Revised by L. C. Charlesworth, Director of Water Resources, Edmonton, Alta.

*British Columbia.**—The surface waters of British Columbia are vested in the Crown in the right of the province and are administered by the Water Rights Branch of the Department of Lands under the Water Act, the Drainage Dyking and Development Act and the Ditches and Watercourses Act. The administration of the Acts is vested in the Comptroller of Water Rights and the Water Board, the latter comprising a Chairman, the Comptroller of Water Rights and the Chief Engineer of the Branch.

Licences to use water for irrigation are issued by the Comptroller of Water Rights, and since 1858, when the first right to use water was given, upwards of 9,000 irrigation licences have been issued.

There are several forms of organization operating irrigation systems in British Columbia, and Table 39, pp. 272-273 of the 1938 Year Book, give statistics of the larger irrigation projects for 1937, the latest year available.

Average Values of Farm Lands.—Statistics showing the average values of farm lands in Canada in 1910 and from 1920 to 1938, are given in Table 42. The values are as estimated by crop correspondents and show the rise in land values between 1910 and 1920, the general decline with moderate fluctuations from 1920 to 1929, and the rapid fall since 1929 to a point below the 1910 level for the country as a whole.

42.—Average Values per Acre of Occupied Farm Lands[1] in Canada, as Estimated by Crop Correspondents, 1910 and 1920-38.

Province.	1910	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
P.E.I.......	31	49	46	45	51	40	45	46	41	44	43	42	34	31	32	34	31	31	34	36
N.S........	25	43	35	34	31	33	37	36	37	34	36	30	29	28	26	27	31	35	32	29
N.B........	19	35	28	32	32	27	34	31	30	31	35	28	26	24	24	24	25	28	26	27
Que........	43	70	59	58	56	53	54	53	57	54	55	48	40	37	36	34	41	38	40	40
Ont........	48	70	63	64	64	65	67	62	65	62	60	52	46	38	38	41	42	44	46	45
Man........	29	39	35	32	28	28	29	29	27	27	26	22	18	16	16	17	17	16	17	16
Sask.......	22	32	29	28	24	24	24	25	26	27	25	22	19	16	16	16	17	15	15	15
Alta.......	24	32	28	24	24	25	26	26	26	28	28	24	20	17	16	16	16	16	16	15
B.C........	74	175	122	120	100	96	88	80	89	90	90	76	74	65	63	60	58	60	58	60
Canada...	**33**	**48**	**40**	**40**	**37**	**37**	**38**	**37**	**38**	**38**	**37**	**32**	**28**	**24**	**24**	**23**	**24**	**24**	**24**	**24**

[1] Orchards and fruit lands, 1938, with 1937 in parentheses: Nova Scotia $88 ($96); Ontario $87 ($89); British Columbia $265 ($261).

Subsection 11.—International Agricultural Statistics.

World Production of Cereals and Potatoes.—Table 43, constructed from data published by the International Institute of Agriculture, shows the areas and yields of wheat, oats, barley, rye, corn, and potatoes for the years 1937 and 1938, in countries of the Northern Hemisphere, and for the years 1937-38 and 1938-39 in countries of the Southern Hemisphere. The annual average acreages and yields are also given for the five-year period, 1932-36 (1932-33 to 1936-37), and the areas and yields of 1938 (1938-39) are compared in percentages with those of the five-year period.

---

* Revised by J. C. MacDonald, Comptroller of Water Rights, Department of Lands, Victoria, B.C.

43.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1937 and 1938, with Five-Year Averages for 1932-36.

Crop and Country.	Acreages.				Yields.			
	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Wheat—								
NORTHERN HEMISPHERE.								
Europe.								
Albania	99	[2]	96	–	1,636	[2]	1,646	–
Belgium	425	429	392	109·5	15,550	17,796	15,891	112·0
Bulgaria	3,234	3,449	3,003	114·9	64,909	78,986	50,289	157·1
Czechoslovakia	2,108	2,218	2,276	97·5	51,266	65,708	58,877	111·6
Denmark	319	324	279	116·1	13,521	16,902	12,265	137·8
Estonia	168	172	152	113·2	2,786	3,056	2,469	123·8
Finland	279	291	131	221·2	7,665	7,973	3,343	238·5
France	12,591	12,502	13,281	–	257,837	345,385	314,785	109·7
Germany[3]	5,522	5,641	6,005	94·0	178,590	214,723	192,020	111·8
Great Britain and Northern Ireland	1,836	1,927	1,729	111·5	56,350	73,136	59,301	123·3
Greece	2,118	2,131	1,866	114·2	32,373	35,934	23,569	152·5
Hungary	3,665	4,006	3,936	101·8	72,157	96,782	79,531	121·7
Ireland	220	230	117	1,966	6,990	7,837	4,228	185·3
Italy	12,782	12,426	12,421	100·0	296,280	297,317	263,171	113·0
Latvia	339	348	316	110·2	6,302	7,052	6,372	110·7
Lithuania	521	500	511	98·0	8,109	9,072	9,259	98·0
Luxemburg	46	57	38	148·3	1,206	1,775	996	178·2
Malta	9	10	10	102·6	326	296	266	111·1
Netherlands	318	321	351	91·3	12,615	15,138	15,657	96·7
Norway	79	86	47	183·2	2,497	2,614	1,334	195·9
Poland	4,184	4,344	4,295	101·1	70,774	84,442	71,607	117·9
Portugal	1,219	[2]	1,353	–	14,668	16,534	18,860	87·7
Roumania	8,777	9,291	7,876	118·0	138,157	181,511	95,263	190·5
Russia (U.S.S.R.)	101,247	100,606	91,029	110·5	1,421,916[4]	1,709,300[4]	1,404,372[4]	121·7
Spain	[2]	[2]	11,165	–	[2]	[2]	157,750	–
Sweden	734	751	704	106·6	25,720	30,170	24,693	122·2
Switzerland	174	177	156	113·1	6,184	6,096	5,048	120·8
Yugoslavia	5,342	5,223	5,205	100·3	86,238	100,902	79,775	126·5
America.								
Canada	25,570	25,931	25,376	102·2	182,410	348,100	300,390	115·9
Mexico	1,273	[2]	1,181	–	11,216	[2]	11,409	–
United States	64,422	70,221	50,154	140·0	875,676	930,801	617,623	150·7
Asia.								
China	42,617	[2]	49,891	–	636,446	[2]	823,767	–
Chosen	839	845	800	105·7	10,242	10,399	8,990	115·7
Cyprus	184	[2]	177	–	2,211	1,963	1,871	104·9
India	33,215	35,635	34,128	104·4	364,075	402,453	349,440	115·2
Iraq	3,250	[2]	2,437	–	21,311	[2]	14,215	–
Japan	1,752	1,777	1,532	116·0	50,410	45,244	42,943	105·4
Manchukuo	2,967	[2]	2,854	–	32,780	30,117	32,823	91·8
Palestine	558	[2]	489	–	4,682	[2]	2,654	–
Syria and Lebanon	1,373	1,412	1,262	111·9	17,227	23,358	14,765	158·2
Turkey	8,323	[2]	7,973	–	132,985	160,424	100,212	160·1
Africa.								
Algeria	4,311	4,139	4,036	102·5	33,106	32,066	33,614	95·4
Egypt	1,421	1,470	1,512	97·3	45,376	45,933	43,747	105·0
Eritrea	49	[2]	17	–	360	[2]	163	–
French Morocco	3,027	2,906	3,150	92·3	20,895	21,476	25,746	83·4
Kenya	66	[2]	45	–	780	[2]	509	–
Libya	102	156	55	284·1	633	[2]	301	–
Tunisia	2,429	1,495	1,868	80·0	17,637	13,962	13,081	106·7
SOUTHERN HEMISPHERE.[5]								
Argentina	19,220	20,868	17,996	116·0	184,799	315,991	231,665	136·4
Australia	13,686	14,105	13,497	104·5	188,018	145,000	163,869	88·5
Chile	1,890	2,047	1,906	107·4	30,394	[2]	30,953	–
New Zealand	186	[2]	257	–	6,043	[2]	8,410	–
Union of South Africa	1,751	2,084	1,804	115·5	10,157	17,407	15,514	112·2
Uruguay	1,375	1,342	1,097	122·3	16,575	15,288	11,019	138·7

---

[1] Most of the figures for 1937 have been revised since the publication of the 1938 Year Book. [2] Not available. [3] Including Austria. [4] Winter crop only. [5] In the Southern Hemisphere the annual statistics are for the crop years 1937-38 and 1938-39, and the averages are for the period 1932-33 to 1936-37

43.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1937 and 1938, with Five-Year Averages for 1932-36—continued.

Crop and Country.	Acreages.				Yields.			
	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Oats—								
NORTHERN HEMISPHERE.								
Europe.								
Albania	29	[2]	24	–	768	[2]	705	–
Belgium	521	522	609	85·7	35,839	37,437	51,312	73·0
Bulgaria	369	353	300	117·8	10,094	6,103	7,351	83·0
Czechoslovakia	1,925	1,902	1,959	97·1	94,547	87,496	91,842	95·3
Denmark	930	924	943	98·1	70,610	79,228	67,757	116·9
Estonia	358	368	345	106·7	9,585	11,691	9,016	129·7
Finland	1,125	1,144	1,140	100·3	49,915	56,287	46,610	120·8
France	8,039	8,101	8,226	98·5	299,455	375,418	324,439	115·7
Germany[3]	7,728	7,403	8,245	89·8	436,242	462,218	444,180	104·1
Great Britain and Northern Ireland	2,299	2,393	2,580	92·8	129,273	119,140	147,893	80·6
Greece	415	383	334	114·6	9,755	10,886	7,258	150·0
Hungary	570	557	546	102·0	18,629	19,185	19,850	96·7
Ireland	573	570	605	94·2	40,128	38,731	41,229	93·9
Italy	1,076	1,107	1,078	102·7	42,696	43,345	36,712	118·1
Latvia	829	860	792	108·5	27,903	30,769	23,597	130·4
Lithuania	861	877	866	101·3	26,715	29,266	24,905	117·5
Luxemburg	64	62	67	92·6	2,692	3,100	3,109	99·7
Netherlands	363	361	332	108·9	25,918	25,284	20,217	125·1
Norway	211	211	226	93·2	12,985	12,521	12,444	100·6
Poland	5,669	5,623	5,499	102·3	161,411	178,847	177,231	100·9
Portugal	645	[2]	489	–	6,925	[2]	6,020	–
Roumania	1,939	1,557	2,001	77·8	35,328	38,581	47,581	81·1
Russia (U.S.S.R.)	43,193	41,196	42,528	96·9	[2]	[2]	[2]	–
Spain	[2]	[2]	1,791	–	[2]	[2]	45,449	–
Sweden	1,640	1,648	1,644	100·3	87,172	98,119	82,959	118·3
Switzerland	27	28	31	89·2	1,653	1,692	1,607	105·3
Yugoslavia	854	894	893	100·1	20,356	22,496	21,834	103·0
America.								
Canada	13,049	13,010	13,558	96·0	268,442	377,315	337,258	111·9
United States	35,256	35 477	36,178	98·1	1,161,612	1,053,839	901,367	116·9
Asia.								
China	2,428	[2]	2,529	–	58,732	[2]	60,488	–
Cyprus	12	[2]	11	–	246	206	198	104·1
Syria and Lebanon	27	24	31	77·4	730	686	876	78·3
Turkey	554	[2]	483	–	15,436	23,254	12,952	179·5
Africa.								
Algeria	477	506	459	110·2	9,565	8,003	9,935	80·5
French Morocco	105	109	70	154·6	2,718	3,307	1,487	222·4
Tunisia	91	77	63	122·3	1,963	2,067	1,185	174·4
SOUTHERN HEMISPHERE.[4]								
Argentina	3,254	3,361	3,391	99·1	47,468	51,671	55,885	92·5
Chile	298	338	225	150·2	8,474	[2]	6,538	–
New Zealand	58	[2]	80	–	3,301	[2]	4,273	–
Union of South Africa	[2]	[2]	521	–	5,845	[2]	7,007	–
Uruguay	221	261	187	139·6	3,328	5,402	2,405	224·6

---

[1] Most of the 1937 figures have been revised since the publication of the 1938 Year Book. [2] Not available. [3] Including Austria. [4] In the Southern Hemisphere the annual statistics are for the crop years 1937-38 and 1938-39, and the averages are for the period 1932-33 to 1936-37.

43.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1937 and 1938, with Five-Year Averages for 1932-36—continued.

Crop and Country.	Acreages.				Yields.			
	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Barley—								
NORTHERN HEMISPHERE.								
Europe.								
Albania	14	[2]	13	–	267	[2]	286	–
Belgium	85	74	86	86·0	3,929	3,696	4,418	83·7
Bulgaria	540	557	555	100·3	15,153	16,255	13,216	123·0
Czechoslovakia	1,661	1,631	1,644	99·2	51,214	59,617	54,842	108·7
Denmark	911	981	864	113·5	50,496	62,466	45,279	138·0
Estonia	220	217	257	84·2	3,717	4,474	4,364	102·5
Finland	299	301	318	94·7	8,082	9,140	8,426	108·5
France	1,860	1,890	1,790	105·6	46,694	58,448	48,644	120·2
Germany[3]	4,632	4,542	4,378	103·7	178,560	205,875	166,484	123·7
Great Britian and Northern Ireland	907	988	914	108·1	30,684	42,046	35,561	118·2
Greece	566	543	527	102·9	10,341	11,664	8,875	131·4
Hungary	1,155	1,127	1,151	97·9	25,580	30,643	30,492	100·5
Ireland	131	118	126	93·7	5,489	5,101	6,065	84·1
Italy	483	492	499	98·6	10,716	11,380	9,856	115·5
Latvia	448	440	461	95·4	10,032	10,131	8,957	113·1
Lithuania	529	536	510	105·2	12,584	12,348	11,108	111·2
Luxemburg	5	5	7	71·9	124	148	181	82·0
Malta	5	5	5	96·3	238	213	213	99·9
Netherlands	121	116	86	134·7	6,204	6,706	4,040	166·0
Norway	149	148	146	101·5	5,933	5,721	5,256	108·9
Poland	3,046	2,910	2,950	98·6	62,622	65,953	65,764	100·3
Portugal	180	[2]	176	–	1,822	[2]	1,877	–
Roumania	3,739	3,114	4,258	73·1	42,129	50,064	62,084	80·6
Russia (U.S.S.R.)	21,574	20,615	19,884	103·7	[2]	[2]	320,058	–
Spain	[2]	[2]	4,660	–	[2]	[2]	107,527	–
Sweden	255	272	260	104·7	9,490	11,896	9,731	122·2
Switzerland	11	11	14	78·1	387	400	393	101·8
Yugoslavia	1,030	1,026	1,040	98·6	17,596	19,349	18,950	102·1
America.								
Canada	4,331	4,454	3,871	115·1	83,124	102,731	72,754	141·2
United States	9,968	10,513	10,032	104·8	220,327	252,139	200,402	125·8
Asia.								
China	14,721	[2]	16,155	–	292,642	[2]	363,478	–
Chosen	2,685	2,737	2,522	108·5	66,592	51,100	47,673	107·2
Cyprus	108	[2]	110	–	2,014	1,875	1,746	107·4
Iraq	2,000	[2]	1,452	–	26,180	[2]	16,391	–
Japan	1,811	1,892	1,942	97·4	72,349	64,182	73,802	87·0
Palestine	553	[2]	544	–	3,464	[2]	2,320	–
Syria and Lebanon	795	803	742	108·2	12,233	17,693	13,137	134·7
Turkey	4,408	[2]	3,906	–	104,572	118,716	73,068	162·5
Africa.								
Algeria	3,093	2,879	3,229	89·2	27,329	27,297	34,830	78·4
Egypt	271	274	303	90·3	10,574	10,687	10,324	103·5
Eritrea	104	[2]	62	–	873	[2]	687	–
French Morocco	4,796	4,240	3,860	109·9	37,943	46,045	54,660	84·2
Libya	304	367	367	100·1	1,771	[2]	2,044	–
Tunisia	1,532	741	1,144	64·8	9,186	5,971	9,508	62·8
SOUTHERN HEMISPHERE.[4]								
Argentina	1,942	2,053	1,843	111·4	23,585	22,047	30,381	72·6
Chile	243	206	175	117·7	7,523	[2]	5,271	–
New Zealand	25	[2]	19	–	1,131	[2]	681	–
Union of South Africa	[2]	[2]	73	–	1,156	[2]	1,357	–
Uruguay	31	[2]	22	–	517	[2]	300	–

---

[1] Most of the figures for 1937 have been revised since the publication of the 1938 Year Book. [2] Not available. [3] Including Austria. [4] In the Southern Hemisphere the annual statistics are for the crop years 1937-38 and 1938-39, and the averages are for the period 1932-33 to 1936-37.

43.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1937 and 1938, with Five-Year Averages for 1932-36—continued.

Crop and Country.	Acreages.				Yields.			
	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.
	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
Rye—								
NORTHERN HEMISPHERE.								
Europe.								
Albania	9	[2]	7	-	151	[2]	136	-
Belgium	376	383	446	85·7	13,583	15,438	17,659	87·4
Bulgaria	521	465	495	93·9	9,387	7,402	8,221	90·0
Czechoslovakia	2,413	2,510	2,535	99·0	58,447	66,139	69,757	94·8
Denmark	344	358	349	102·6	9,889	11,417	9,691	117·8
Estonia	368	365	359	101·7	8,327	7,246	7,552	95·9
Finland	597	607	579	104·8	16,982	14,684	13,816	106·3
France	1,639	1,640	1,687	97·2	29,119	31,665	31,944	99·1
Germany[3]	11,161	11,421	12,074	94·6	289,130	356,431	334,889	106·4
Greece	176	178	175	101·6	2,579	2,448	2,238	109·4
Hungary	1,499	1,555	1,592	97·7	24,325	30,747	29,820	103·1
Ireland	2	2	3	66·7	55	52	77	67·5
Italy	259	257	276	93·2	5,701	5,437	6,018	90·3
Latvia	713	709	640	110·8	16,592	14,909	13,514	110·3
Lithuania	1,259	1,305	1,223	106·7	23,894	24,647	23,428	105·2
Luxemburg	16	18	20	91·3	392	513	504	101·8
Netherlands	563	585	471	124·4	19,036	21,259	17,285	123·0
Norway	15	13	15	87·1	443	433	453	95·7
Poland	14,138	14,571	14,190	102·7	221,953	272,431	256,909	106·0
Portugal	348	[2]	369	-	3,978	[2]	4,293	-
Roumania	1,083	1,186	946	125·4	17,769	26,377	13,389	197·0
Russia (U.S.S.R.)	56,486	50,284	59,925	85·2	[2]	[2]	863,155	-
Spain	[2]	[2]	1,457	-	[2]	[2]	21,087	-
Sweden	524	497	551	90·1	16,250	15,783	17,269	91·4
Switzerland	37	38	40	92·8	1,296	1,281	1,316	97·3
Yugoslavia	546	530	526	100·8	8,243	9,051	8,279	109·3
America.								
Canada	894	741	677	109·5	5,771	11,115	6,248	177·9
United States	3,846	3,979	2,944	135·2	49,830	55,039	32,366	170·1
Asia.								
Turkey	875	[2]	688	-	17,674	21,267	10,795	197·0
Africa.								
Algeria	3	5	3	159·1	37	72	29	247·1
French Morocco	9	[2]	4	-	28	[2]	25	-
SOUTHERN HEMISPHERE.[4]								
Argentina	2,184	2,254	1,896	118·9	3,523	11,614	9,594	121·0
Corn—								
NORTHERN HEMISPHERE.								
Europe.								
Albania	227	[2]	208	-	5,393	[2]	4,760	-
Bulgaria	1,685	1,731	1,751	98·9	33,828	20,406	35,493	57·5
Czechoslovakia	456	447	382	117·0	13,511	9,087	9,685	93·8
France	854	848	842	100·7	20,257	25,071	19,353	129·5
Germany[3]	254	343	183	187·4	11,915	15,344	6,771	226·6
Greece	652	670	618	108·4	10,596	7,846	9,253	84·8
Hungary	2,955	2,905	2,830	102·6	108,607	101,600	81,500	124·7
Italy	3,634	3,718	3,613	102·9	133,687	95,836	113,177	84·7
Poland	228	218	227	95·9	4,060	[2]	3,691	-
Portugal	909	[2]	1,040	-	12,774	[2]	12,503	-
Roumania	12,749	12,355	12,374	99·8	187,071	208,653	207,745	100·4
Spain	[2]	[2]	1,082	-	-	[2]	28,314	-
Switzerland	2	[2]	2	-	98	[2]	94	-
Yugoslavia	6,649	6,584	6,371	103·3	210,065	173,499	171,128	101·4

---

[1] Most of the figures for 1937 have been revised since the publication of the 1938 Year Book. [2] Not available. [3] Including Austria. [4] In the Southern Hemisphere the annual statistics are for the crop years 1937-38 and 1938-39, and the averages are for the period 1932-33 to 1936-37.

43.—Acreages and Yields of Cereals and Potatoes in Countries of the World, 1937 and 1938, with Five-Year Averages for 1932-36—concluded.

Crop and Country.	Acreages.				Yields.			
	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.	1937.[1]	1938.	Average 1932-36.	1938 in p.c. of Average.
Corn—concluded.	'000 acres.	'000 acres.	'000 acres.	p.c.	'000 bu.	'000 bu.	'000 bu.	p.c.
America.								
Canada	166	180	152	118·4	5,415	7,690	6,151	125·0
United States	93,741	91,792	99,544	92·2	2,651,284	2,542,238	2,120,574	119·9
Asia.								
China	[2]	[2]	11,201	-	[2]	[2]	246,115	-
Manchukuo	3,445	[2]	2,839	-	78,572	92,329	70,513	130·9
Palestine	18	[2]	14	-	341	[2]	142	-
Syria and Lebanon	48	[2]	54	-	1,070	[2]	928	-
Turkey	1,117	[2]	1,016	-	21,301	28,130	20,069	140·2
Africa.								
Algeria	16	15	19	80·0	140	148	204	72·4
Egypt	1,619	1,554	1,705	91·1	65,004	62,110	65,067	95·5
Eritrea	25	[2]	26	-	154	[2]	329	-
French Morocco	1,120	1,068	963	110·9	6,360	7,598	7,449	102·0
Kenya	113	114	122	93·4	3,457	3,165	3,379	93·6
Tunisia	67	[2]	48	-	236	[2]	220	-
SOUTHERN HEMISPHERE.[3]								
Argentina	22,626	[2]	28,208	-	174,166	[2]	346,391	-
Chile	107	[2]	123	-	2,211	[2]	2,661	-
Madagascar	280	[2]	205	-	4,921	[2]	3,259	-
Union of South Africa	6,051	[2]	5,780	-	62,889	[2]	67,238	-
Potatoes—								
NORTHERN HEMISPHERE.								
Europe.								
Belgium	390	364	407	89·5	113,567	119,725	129,503	92·4
Bulgaria	54	49	36	135·8	5,366	2,625	3,427	76·6
Czechoslovakia	1,914	1,887	1,844	102·3	454,239	361,151	333,854	108·2
Denmark	199	195	185	105·6	48,648	51,073	47,829	106·8
Estonia	187	193	175	109·9	36,214	34,725	33,416	103·9
Finland	214	226	203	111·6	50,979	48,501	44,874	108·1
France	3,555	3,468	3,483	99·6	584,633	628,096	569,736	110·2
Germany[4]	7,674	7,652	7,531	101·6	2,164,169	1,969,430	1,747,054	112·7
Great Britian and Northern Ireland	715	733	763	96·1	183,530	164,416	191,943	85·7
Greece	58	52	44	117·3	5,827	[2]	3,962	-
Hungary	729	720	722	99·7	94,039	85,141	68,899	123·6
Ireland	327	327	340	96·2	101,036	118,489	97,480	121·6
Italy	1,043	1.054	1,052	100·2	118,031	119,439	98,466	121·3
Latvia	314	340	276	123·4	65,476	64,350	52,367	122·9
Lithuania	456	460	439	104·8	92,223	75,995	73,958	102·8
Luxemburg	43	41	41	100·4	7,545	10,367	6,745	153·7
Malta	10	9	8	111·7	1,258	1,049	869	120·7
Netherlands	341	343	367	93·5	97,395	103,799	108,511	95·7
Norway	128	132	123	107·9	31,619	37,787	34,352	110·0
Poland	7,365	7,488	6,908	108·4	1,477,843	1,238,827	1,165,183	106·3
Portugal	75	[2]	80	-	21,902	[2]	21,143	-
Roumania	775	[2]	716	-	77,399	[2]	69,322	-
Spain	[2]	[2]	1,103	-	[2]	[2]	184,566	-
Sweden	333	[2]	328	-	69,337	68,803	71,250	96·6
Switzerland	121	123	115	106·9	32,255	27,521	26,295	104·7
Yugoslavia	657	[2]	636	-	59,528	[2]	56,455	-
America.								
Canada	531	522	525	99·4	42,547	35,774	41,708	85·8
United States	3,174	3,008	3,432	87·6	236,483	221,578	221,176	100·2
Asia.								
Syria and Lebanon	30	[2]	17	-	4,393	[2]	1,447	-
Turkey	136	[2]	115	-	6,851	10,979	5,014	219·0
Africa.								
Algeria	44	17	41	41·5	4,830	2,447	3,665	66·8

---

[1] Most of the figures for 1937 have been revised since the publication of the 1938 Year Book. [2] Not available. [3] In the Southern Hemisphere the annual statistics are for the crop years 1937-38 and 1938-39, and the averages are for the period 1932-33 to 1936-37. [4] Including Austria.

World Exports and Imports of Wheat and Flour.—Statistics showing the exports and imports of wheat and wheat flour for the principal countries of the world in the crop year ended July 31, 1938, with comparative figures for the previous crop year, are shown in Table **44.** This information is taken from data published by the International Institute of Agriculture. During the crop year 1937-38, a total of 580,787,000 bushels of wheat and wheat flour expressed in bushels of wheat is shown as exported, as compared with 672,798,000 bushels in the previous year.

44.—Exports of Wheat and Flour from the Principal Wheat-Exporting Countries and Imports of Wheat and Flour into the Principal Wheat-Importing Countries, crop years ended July 31, 1937 and 1938.

Wheat.	Twelve Months Aug. 1–July 31.		Flour.	Twelve Months Aug. 1–July 31.	
	1936–37.	1937–38.		1936–37.	1937–38.
	'000 bu.	'000 bu.		'000 bbl.	'000 bbl.
Exports—			**Exports—**		
United States	5,287	90,075	United States	3,891	5,183
Canada	174,858	76,714	Canada	4,526	3,610
Argentina	157,275	67,385	Argentina	1,091	902
Australia	73,627	93,361	Australia	5,645	6,621
Hungary	21,868	6,756	India	436	740
Yugoslavia	17,977	3,919	Hungary	690	489
Other countries	110,567	128,385	Other countries	8,463	7,831
Totals, Exports	**561,459**	**466,595**	**Totals, Exports**	**24,742**	**25,376**
Imports—			**Imports—**		
Germany	31,016	35,204	Germany	244	652
Belgium	43,733	41,573	Austria	261	188
France	14,330	18,164	Denmark	82	149
United Kingdom	184,469	180,547	Finland	245	293
Ireland	12,200	12,841	United Kingdom	4,844	4,497
Netherlands	18,996	21,077	Ireland	71	60
Sweden	1,914	1,660	Norway	460	349
Switzerland	17,727	14,953	Netherlands	726	762
Czechoslovakia	321	4,655	Other countries	4,975	6,141
Other countries	203,159	103,787			
Totals, Imports	**527,865**	**434,461**	**Totals, Imports**	**11,908**	**13,091**

World Live Stock.—The statistics of Table **45,** compiled from data published by the International Institute of Agriculture, show as nearly as possible the world situation with regard to live stock about 1936. For many countries, the figures are the result of careful enumeration, while for others they represent only approximate estimates. In the cases of Mexico and Kenya, the figures are for 1930, as are also those for horses in Uruguay, the Union of South Africa, and Santo Domingo, those for swine in Uruguay and Santo Domingo and those for cattle in the latter country. Earlier figures are: Belgium (sheep, 1929); Peru (1929); Bulgaria (1926); Venezuela (cattle, and sheep, 1929; horses and swine, 1921); Siam (swine, 1921).

45.—Numbers of Live Stock in Principal Countries, *circa* 1936.

Continent and Country.	Horses.	Cattle.	Sheep.	Swine.
Europe—				
Austria	261,200	2,348,600	263,400	2,823,000
Belgium	263,100[1]	1,782,800	187,400	1,054,500
Bulgaria	482,200	1,817,400	8,739,800	1,002,100
Czechoslovakia	703,800	4,595,600[2]	591,800	3,242,200
Denmark[3]	536,000	3,107,500	187,000	3,496,500
Finland	368,600	1,879,200	1,022,900	459,400

For footnotes, see end of table, p. 246.

45.—Numbers of Live Stock in Principal Countries, *circa* 1936—concluded.

Continent and Country.	Horses.	Cattle.	Sheep.	Swine.
Europe—concluded.				
France	2,774,100[4]	15,762,100	9,808,300	7,088,700
Germany	3,410,300[4]	20,088,000	4,340,600	25,891,600
Great Britain and Northern Ireland	1,111,300	8,623,000	25,040,200	4,561,800
Greece	359,300	985,500	8,440,000	606,800
Hungary	794,300	1,734,300	1,350,400	2,554,300
Ireland	423,500	4,014,000	3,061,500	1,016,500
Italy	814,600[4]	7,233,900[5]	8,890,700	3,187,400
Latvia	388,800	1,261,400	1,351,600	674,400
Lithuania	553,100	1,178,000	656,400	1,190,000
Netherlands	295,100	2,569,800	654,500	1,679,000
Norway[3]	185,500	1,348,400	1,748,600	410,000
Poland	3,824,100[4]	10,198,100[4]	3,024,400	7,058,700
Portugal	90,300	905,200	3,274,000	1,206,000
Roumania	2,166,600[4]	4,327,200	11,838,300	2,970,400
Spain	568,100	3,569,800	19,093,300	5,411,500
Sweden	616,000	2,950,000	429,000	1,322,000
Switzerland	139,500	1,568,300	175,400	876,000
Russia (U.S.S.R.)[6]	16,600,000	56,500,000	73,300,000[7]	30,400,000
Yugoslavia	1,216,100[8]	4,073,700[3]	9,568,300[3]	3,126,200[1]
Northern and Central America—				
Canada	2,891,500	8,840,600	3,327,100	4,145,000
Cuba	568,700	4,651,000	163,900	951,800
Santo Domingo (Dominican Republic)	150,000	900,000	63,000	1,100,000
Mexico	1,887,500	10,083,000	3,673,900	3,698,200
United States[1]	11,445,000	66,448,000	52,588,000	42,948,000
South America—				
Argentina	8,527,200	33,100,500	43,790,200	3,975,700
Brazil	6,051,700	40,513,900	12,645,100	23,182,500
Chile	527,800	2,573,000	5,752,100	570,400
Colombia	972,000	8,337,100	872,400	1,621,900
Peru	432,100	1,805,900	11,209,200	688,700
Uruguay	622,900	7,372,400	15,405,600	307,900
Venezuela	167,700	2,750,000	125,000	512,100
Asia—				
Burma	54,400	5,096,700	77,400	539,500
China	4,080,000	22,647,000	20,957,000	62,639,000
Formosa	600	78,600	200	1,813,000
India	2,379,100	161,381,100	42,624,100	[9]
Indo-China	80,500	2,177,200	15,700	3,514,200
Iran	406,900	2,173,500	16,018,600	[9]
Iraq	[9]	[9]	4,782,800	[9]
Japan	1,431,900	1,770,900	61,000	1,109,700
Korea	51,600	1,703,000	12,100	1,573,600
Manchukuo	1,840,000	1,428,000	3,000,000	5,108,000
Netherlands East Indies[10]	656,100	4,402,200	1,803,900	1,259,800
Philippines	420,900[11]	1,534,800	151,500	3,126,300
Siam	374,200	5,411,700	[9]	864,200
Syria and Lebanon	68,700	449,000[2]	2,195,200	7,200
Turkey[6]	673,000	6,094,800	14,800,800	[9]
Africa—				
Algeria	185,500	841,500	6,267,600	56,300
Egypt[12]	34,100	994,900	1,495,900	13,600
French Morocco[13]	215,500	1,959,500	9,264,600	66,500
French West Africa	182,800	3,456,800	8,404,400	107,900[14]
Kenya	2,400	5,192,900	3,227,700	17,400[15]
Madagascar	2,000[12]	4,990,300	208,000	650,000
Nigeria[16]	176,800[12]	2,750,200	1,992,900	63,100
Southern Rhodesia	2,800	2,301,000	306,100	105,600
Territory of South West Africa	23,500	706,700	1,653,400	11,800
Tanganyika	100	4,837,400	1,861,600	8,500
Tunisia	118,800	538,800	3,532,200	28,700
Union of South Africa	867,600	11,081,200	39,866,400	1,060,700
Oceania—				
Australia	1,764,400	13,911,700	108,885,800	1,294,000
New Zealand	276,200	4,254,100	30,113,700	808,500

---

[1] On farms only. [2] Cattle and buffalo. [3] In rural districts only. [4] Exclusive of animals belonging to the Army. [5] Not including animals belonging to the Army and travelling. [6] Includes territory in Europe and Asia. [7] Sheep and goats. [8] Work horses only. [9] Not available. [10] Animals owned by natives only. [11] Horses and mules. [12] Exclusive of animals belonging to the British Army. [13] Number registered for fiscal purposes. [14] Exclusive of Niger and French Sudan. [15] Exclusive of a large number of pigs kept by natives. [16] Exclusive of Southern Cameroons.

CHAPTER IX.—FORESTRY.*

NOTE.—A short article on "Physiography, Geology, and Climate, as Affecting the Forests" was published at pp. 311-313 of the 1934-35 Year Book.

Section 1.—Forest Regions.

The forests of Canada cover a vast region in the north temperate climatic zone, reaching from the Atlantic ocean to the Pacific; they extend northward from the International Boundary to beyond the Arctic Circle. Wide variations in climatic, physiographic, and soil conditions cause marked differences in the character of the forests in different parts of the country, hence more or less well-defined forest regions may be recognized. The following principal regions are described separately: Acadian, Great Lakes-St. Lawrence, Deciduous, Boreal, Sub-Alpine, Columbia, Montane, and Coast. For descriptive purposes, it is convenient to consider two sections of the Boreal Region as separate entities, and they are described hereunder as the Northern Transition, and the Aspen Grove Sections.

The Acadian Forest Region.—This region includes all of the province of Nova Scotia and Prince Edward Island, and all but the northwest corner of New Brunswick. Its climate is characteristic of maritime regions, and is highly favourable to tree growth. Annual precipitation averages about 40 inches. Topography and geology are widely varied. In northern New Brunswick the maximum altitude is 2,700 feet above sea-level, and northern Cape Breton island and parts of Nova Scotia are fairly rough. The surface of the remainder of the region varies from level to gently rolling.

There is a general coniferous character to the region, especially in the northern parts of New Brunswick and Cape Breton island. Mixed forests, interspersed with so-called "hardwood ridges", are common, however, occurring more frequently in the southern parts of New Brunswick and Nova Scotia.

Among the coniferous species red spruce is the characteristic dominant, and is usually associated with balsam fir. White and black spruce, and white and red pine, are widely distributed. Jack pine occurs in pure stands on sandy plains. Hemlock, which is still to be found in most parts of the region, is believed to have been much more important in former times. Other characteristic conifers are cedar and tamarack.

Yellow birch, maple, and beech occur in fairly large quantities and usually occupy well-drained ridges. White birch, wire birch, and poplar are found in association with the coniferous species. Among the other hardwoods are oak, butternut, basswood, ash, and elm.

The Great Lakes-St. Lawrence Forest Region.—This forest, centring on the Great Lakes system, and extending eastward down the St. Lawrence valley, is of an irregular character. It occupies a middle position between predominantly coniferous forests to the north and the deciduous forests to the south. Precipitation varies from an annual average of 25 inches in the west to 45 inches in the east, and the growing season is from 100 to 150 days. Good forest soils of sedimentary origin are common, but southward extensions of the granitic areas of the Canadian Shield are also included within the boundaries of the region.

---

* Material in this chapter, with the exception of the special article appearing at pp. 254-263, has been prepared by R. G. Lewis, B.Sc. F., Chief of the Forestry Branch of the Dominion Bureau of Statistics, in co-operation with Roland D. Craig, F.E., of the Dominion Forest Service of the Department of Mines and Resources. Section 1 is based on Dominion Forest Service Bulletin No. 89, "A Forest Classification for Canada", by W. E. D. Halliday. The Forestry Branch of the Bureau of Statistics collects and compiles statistics relating to forest production and publishes four annual printed reports covering the lumber industry, the pulp and paper industry, and the wood-using and paper-using industries of Canada. These printed reports are usually preceded by a number of preliminary mimeographed reports, one for each important industry or group of industries. For detailed list of publications, see Chapter XXIX.

The characteristic species are white pine, red pine, and hemlock, associated with the maples, yellow birch, and, in some sections, beech and basswood. Aspen, cedar, and jack pine are widely distributed, and spruce and balsam fir are common in certain localities. Among the less widely distributed hardwood species are white birch, elm, hickories, white and black ash, bur, red, and white oak, ironwood, and butternut.

The pine forests of the Ottawa valley and Algonquin Park have been famous as one of the greatest of Canada's lumbering areas. Elsewhere in the region forests of mixed type predominate, with a considerable proportion of pure hardwood stands in the more favoured locations towards the south.

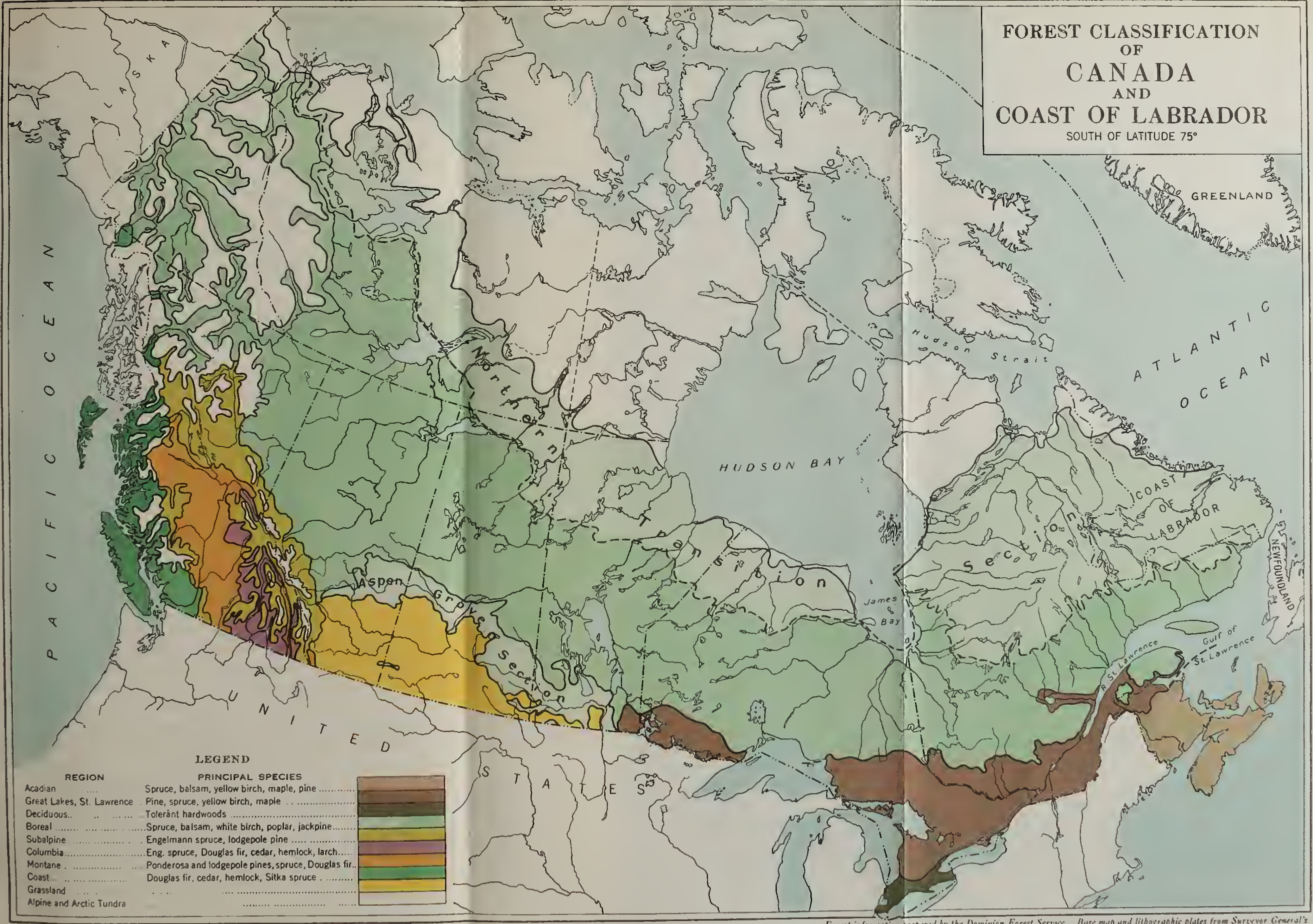
The Deciduous Forest Region.—This region in Canada consists of a small northerly intrusion from the great forest of the same type in the United States, and occupies the southwestern portion of what is commonly referred to as the Ontario peninsula. It enjoys very favourable climatic and soil conditions which permit of the growth of a number of tree species not found elsewhere in Canada. Because of its fertile soil, the area is completely settled, and the forests are now represented only by woodlots, parks, and small wooded areas on the lighter soils.

Among the characteristic trees are beech and sugar maple, together with basswood, red maple, and several oaks. Coniferous species are largely represented by scattered specimens of white pine, hemlock, and red juniper.

Among the less common hardwoods, which occur singly or in small groups, are hickories, black walnut, chestnut, tulip tree, magnolia, mulberry, sycamore, sassafras, black gum, Kentucky coffee tree, and a number of other species which find their northern limit in this region.

The Boreal Forest Region.—This region covers the greater part of the land area of Canada. It stretches unbrokenly from the Atlantic coast of Quebec westward to Alaska. Along its southern side it follows the limits of the Great Lakes-St. Lawrence Region, then skirts the open grasslands of the Prairie Provinces, and is terminated in the west in the foothills of the Rocky mountains. To the north it is bounded by the limits of tree growth.

The principal trees of the region are white and black spruce, balsam fir, poplars, white birch, and jack pine. Near the foothills of the Rocky mountains the latter species is replaced by lodgepole pine. In Quebec and Ontario, and as far west as a line running from lake Winnipeg to lake Athabaska in the Prairie Provinces, the region is, for the most part, underlain by granitic rocks of the Precambrian formations known as the Canadian Shield. Within the area described there are extensive tracts of good soil, formed from glacial or sedimentary deposits, but a larger portion of the region is characterized by shallow soils. Very considerable areas of bare rock testify to the disastrous results of forest fires followed by erosion.


ALASKA
PACIFIC OCEAN
Northern Transition Section
Aspen Grove Section
HUDSON BAY
Hudson Strait
James Bay
COAST OF LABRADOR
ATLANTIC OCEAN
GREENLAND
NEWFOUNDLAND
R. St. Lawrence
Gulf of St. Lawrence
UNITED STATES

FOREST CLASSIFICATION OF CANADA AND COAST OF LABRADOR

SOUTH OF LATITUDE 75°

LEGEND

REGION	PRINCIPAL SPECIES	
Acadian	Spruce, balsam, yellow birch, maple, pine	🟫
Great Lakes, St. Lawrence	Pine, spruce, yellow birch, maple	🟫
Deciduous	Tolerant hardwoods	🟫
Boreal	Spruce, balsam, white birch, poplar, jackpine	🟩
Subalpine	Engelmann spruce, lodgepole pine	🟨
Columbia	Eng. spruce, Douglas fir, cedar, hemlock, larch	🟪
Montane	Ponderosa and lodgepole pines, spruce, Douglas fir	🟧
Coast	Douglas fir, cedar, hemlock, Sitka spruce	🟩
Grassland		🟨
Alpine and Arctic Tundra		⬜

Forest information prepared by the Dominion Forest Service. Base map and lithographic plates from Surveyor General's Office, Ottawa. Printed by the Geographical Section, General Staff, Department of National Defence.

of an irregular
coniferous fores
varies from an
the growing sea
are common, b
are also includ

The chara
with the mapl
cedar, and jack
certain localiti
birch, elm, hic
butternut.

The pine
as one of the
forests of mixe
stands in the r

The Deci
northerly intru
occupies the s
peninsula. It
the growth of
its fertile soil,
only by woodl

Among th
wood, red ma
scattered spec

Among t
are hickories,
sassafras, blac
find their nort

The Bor
area of Canac
ward to Alask
St. Lawrence
is terminated
bounded by t

The prin
white birch,
species is rep
a line runnin
the region is,
formations k
extensive tra
larger portio
areas of bare

The forests of this part of the region are mainly coniferous, with black spruce and balsam fir as dominants, and are valuable chiefly for pulpwood.

West of lake Winnipeg the same tree species are in evidence but in different proportions. Here the soil is deep and relatively fertile, and the characteristic forest is a mixture of poplar and white spruce.

The climate of the region is severe, and precipitation ordinarily varies from 15 to 30 inches annually, although these amounts are exceeded in eastern Quebec.

The Northern Transition Section.—This area is a part of the Boreal Region, but is described separately because none of its forests is of commercial value although of considerable local economic value. It represents a transition from the merchantable forests of the south to the treeless wastes of the far north. White and black spruce, larch, and birch are the principal tree species, and these are usually of stunted growth because of the severity of the climate. In river valleys and other protected sites occasional clumps of trees of fair size are to be found. The principal economic value of the forests probably consists in the habitat which they provide for fur-bearing animals, and the wood they furnish for fuel and buildings for the scattered inhabitants of the region.

The Aspen Grove Section.—This section, which lies entirely within the Prairie Provinces, is also a part of the Boreal Region, but has very special characteristics. It is a zone of transition between the true forest region to the north and the open grasslands to the south. Aspen is the dominant tree, and is in sole possession of most of the area. In southern Manitoba stands of bur oak are found, and elm, basswood, and ash occur singly or in small groups in river bottoms. Most of the area is farmed and much of the forest is now in the form of woodlots.

The Sub-Alpine Forest Region.—This is essentially a coniferous forest extending from the grasslands of the prairies and the western border of the Boreal Region up the east slopes of the Rockies to timber-line. This same type of forest reappears in a narrow strip extending northwesterly from the International Boundary between the plateaux of the Montane Region and the non-forested tundra formation of the mountain tops of the Coast ranges.

In general, this forest formation occupies areas from 3,500 to 6,000 feet above sea-level. Rainfall is moderate, temperatures are low, and the growing season is short. The topography is mountainous with steep-sided valleys, and the soils are mostly derived from glacial and other residual material. The dominant tree species are Englemann spruce, alpine fir, and lodgepole pine. Less widely distributed are mountain hemlock, alpine larch, and white-barked pine.

The Columbia Forest Region.—This region, often referred to as the Interior Wet Belt of British Columbia, supports forests which are somewhat similar in composition to those of the Coast Region.

The forests properly attributable to the Columbia Region comprise stands in the valleys of the Columbia and other rivers which lie between elevations of 2,500 feet and 4,000 feet above sea-level. Below this range occurs the Montane Region, and above it the Sub-Alpine. The climate is intermediate between those of the Coast and Montane Regions. The precipitation varies from 30 to 60 inches. The region should actually be mapped as a series of 'islands' and 'stringers' surrounded by patches of Sub-Alpine forest; but it is impracticable to do this on so small a scale as is used for the map facing page 248.

Some authorities consider the Columbia Region to be merely an extension of the Coast Forest Region. Because of the complete physical separation of the two regions in Canada, and also because of important differences in environmental conditions, the division made here has been adopted.

The principal species in this region are Englemann spruce, western red cedar, western hemlock, and Douglas fir. Among other species of considerable importance are alpine and grand firs, western white pine, and western larch. Lodgepole pine commonly replaces stands destroyed by fire. Black cottonwood is found on rich alluvial soils.

The Montane Forest Region.—This region forms part of what is often termed the Interior Dry Belt of British Columbia. It occupies an extensive series of plateaux, valleys, and ranges in the interior of the province, which extends northward from the International Boundary to the valley of the Skeena river. The climate is relatively dry, with low summer rainfall, and moderate to high temperatures. The dryest conditions are found in the lower river valleys, where the forest gives way to open grassland.

The principal tree species are ponderosa pine, Douglas fir, lodgepole pine, and aspen. Towards the northern half of the region ponderosa pine disappears and associations of Douglas fir and lodgepole pine become dominant. Towards the north and east, stands of Englemann spruce and alpine fir grade into the forests of the Sub-Alpine and Columbia Regions. Aspen is an important constituent of the northern parts of this forest.

The Coast Forest Region.—This region includes the western slope of the Coast and Cascade mountains and the insular system, the higher elevations of which form Vancouver island, the Queen Charlotte group, and other islands along the coast.

The climate in this region is mild and equable, with heavy precipitation varying from 40 to 200 inches per annum, about 70 p.c. of which falls during the autumn and winter months. These conditions are conducive to the luxurious growth of coniferous forests, and produce the largest trees and the heaviest stands in the Dominion.

The dominant trees are western hemlock and western red cedar. Associated with these are Douglas fir in the south and Sitka spruce in the north. All four of these species, of which the most important commercially is Douglas fir, grow to large sizes, and occasionally are found in stands running up to 100,000 ft. b.m. per acre. Other conifers which occur in the region but are of much less importance include: yellow cedar; mountain hemlock; amabilis, grand, and alpine firs; and western white pine. Of the broad-leaved trees, several alders are widely distributed, and Garry oak and madrona are found in the vicinity of the straits of Georgia. Broad-leaved maple and vine maple occur at low elevations in the southern sections, and black cottonwood, which is perhaps the most important hardwood from the commercial point of view, is found on alluvial soils in the valleys.

Section 2.—Important Tree Species.

In Canada there are approximately 125 species or distinct varieties of trees. Only 33 of these are conifers commonly known as "softwoods", but they comprise over 80 p.c. of the standing timber and 70 p.c. of the wood utilized for all purposes. While the number of deciduous-leaved or "hardwood" species is large, only about a dozen are of a commercial importance comparable with that of about two dozen species of conifers.

For descriptions of the individual tree species, the reader is referred to pp. 283-286 of the Canada Year Book, 1936, where the chief tree species were covered, and to Dominion Forest Service Bulletin No. 61, "Native Trees of Canada", published by the Department of Mines and Resources, where the subject is treated in detail.

Section 3.—Forest Resources.

Areas.—The total land area of Canada, revised according to the latest surveys, is estimated at 3,466,556 square miles, of which 549,700 square miles is considered as being suitable for agricultural or pastoral purposes. About 254,873 square miles of this agricultural land is occupied and of this 213,236 square miles is classified as improved and under pasture and 41,637 square miles as forested.

On p. 27, the area of forested lands is shown in detail. It will be seen that the total area covered by existing forests is 1,223,522 square miles, including 41,637 square miles of occupied agricultural land still forested. Most of this will, no doubt, be left under forest cover in the form of farmers' woodlots. There is also a considerable area of forest land which is of agricultural value and will eventually be cleared, but it is estimated that 1,100,000 square miles is essentially forest land which can best be utilized for forest production. The accessible and productive forest area is estimated to be 769,463 square miles, of which 360,548 square miles carries timber of merchantable size and on 408,915 square miles there is young growth which, if protected from fire, will eventually produce merchantable timber. The remaining area of 454,059 square miles carries forests of value either because of their influence on water control, climatic conditions, game conservation, or by reason of their attraction to tourists and their value as a source of wood for local use. On account of their geographical location or because of unfavourable growth conditions these forests at present are considered as non-productive from a commercial viewpoint.

As a result of the constant and inevitable improvement in conditions affecting profitable exploitation, such as the extension of settlement and transportation facilities, the increasing world scarcity of forest products, and the ever-increasing demand for these products, due to the development of industry, the discovery of new uses for wood, and the improvements in the methods, equipment, and machinery used in logging and manufacturing forest products, some of this inaccessible timber will eventually become commercially exploitable. It is estimated that of the accessible forest area 442,354 square miles is producing softwood or coniferous timber, 221,138 square miles mixed softwoods and hardwoods, and 105,971 square miles hardwood or broad-leaved species.

In Canada as a whole about 10·5 p.c. of the total forest area has been permanently dedicated to forest production. The distribution of Dominion forest experimental areas, provincial forests, provincial parks and national parks, by provinces, is shown in the following statement.

FOREST RESERVES AND PARKS IN EACH PROVINCE, 1939.

Province.	Dominion Forest Experimental Areas.	Provincial Forest Reserves.	Provincial Parks.	National Parks.	Total.
	sq. miles.	sq. miles.	sq. miles.	sq. miles.	sq. miles.
Prince Edward Island	Nil	Nil	Nil	7·00	7·00
Nova Scotia	"	"	"	400·00	400·00
New Brunswick	35·00	"	"	0·10	35·10
Quebec	7·25	31,922·00	5,138·00	Nil	37,067·25
Ontario	97·10	19,606·00	4,248·00	11·69	23,962·79
Manitoba	35·95	3,775·14	Nil	1,148·04	4,959·13
Saskatchewan	Nil	10,003·15[1]	258·38	1,869·00	12,130·53
Alberta	62·60	14,315·76	2·27	7,316·00[2]	21,696·63
British Columbia	Nil	26,739·00	8,252·04	1,715·00	36,706·04
Totals	237·90	106,361·05	17,898·69	12,466·83	136,964·47

[1] Of this area 286·39 square miles have been placed under provincial park regulations. [2] Not including the Wood Buffalo Park, partly in Alberta and partly in the Northwest Territories, and the Tar Sands Reserve.

Of the total forest area, 8·5 p.c. has been permanently alienated, being owned in fee simple by private individuals or corporations. The Crown still holds title to 13·3 p.c. of the area, but has alienated the right to cut timber thereon under lease or licence. So far 78·2 p.c. has not been alienated in any way. It may be said that 91·5 p.c. of Canada's forest area is still owned by the Crown in the right either of the Dominion or the provinces and, subject only to certain temporary privileges granted to limit-holders, may at any time be placed under forest management and dedicated to forest production.

Volume of Standing Timber.—In 1935, the total stand of timber in Canada was estimated to be approximately 273,656 million cubic feet, of which 222,076 million cubic feet was of coniferous species and 51,580 million cubic feet of broad-leaved species. This estimate is the latest that has been made, officially.

During the ten years 1926-35, the average annual depletion due to use was approximately 2,034 million cubic feet of conifers and 547 million cubic feet of hardwoods. The average annual loss from fire was estimated at 241 million cubic feet of conifers and 26 million cubic feet of hardwoods. The loss from attacks of insects and fungi can only be estimated in a broad way, but it is placed at 700 million cubic feet annually for the ten-year period. In Nova Scotia, in 1931, the balsam suffered severely from "gout" induced, it is believed, by minute sucking insects of the genus *Dreyfusia*, previously undescribed. In the Gaspe peninsula the spruce saw-fly has become a serious menace, spreading to New Brunswick and as far west as Ontario. The total annual depletion during the ten-year period was, therefore, estimated to have been about 3,548 million cubic feet. To what extent this loss has been replaced by growth increment is not known but, considering the preponderance of the younger age classes in the reproduction, it is believed there has been a considerable net depletion in the merchantable age classes.

Another real difficulty is the division of the existing stand into merchantable timber and that which is inaccessible or unprofitable, since merchantability depends not only on the location but on the density of the stand, the demands of the market for certain species or qualities of product, and the regulations as to cutting. Light stands covering large areas may in the aggregate carry very large amounts of timber and still not be exploitable at a profit. For some species, such as aspen and white birch, which comprise three-quarters of the hardwoods, there is very little demand, and therefore these cannot properly be classed as merchantable, though accessible as far as location is concerned.

In June, 1929, a conference of the Dominion and provincial forest authorities was held in Ottawa and it was decided to undertake a national inventory of the forest resources of Canada, each authority conducting the necessary stock-taking surveys on the land under its jurisdiction. In connection with the inventory, data are being secured regarding the depletion due to use, fire, insect damage, etc., and the increment accruing. The Forest Service of the Department of Mines and Resources acts as a clearing-house for the national inventory, and in addition to collecting and compiling the data furnished by the provincial authorities has conducted the inventorial work in the Prairie Provinces and the Maritime Provinces. The inventories for Manitoba and New Brunswick have been completed. The Dominion Service is also carrying on extensive surveys to determine the increment taking place in the forests and conducting more intensive silvicultural research at forest experiment stations located in New Brunswick, Quebec, Ontario, Manitoba, and Alberta.

Under present conditions it is estimated that 133,290 million cubic feet of conifers and 36,853 million cubic feet of hardwoods may be considered as accessible.

1.—Estimate of Total Accessible Stand of Timber in Canada, Classified by Type and Merchantable Size, by Provinces and Regions, with Estimate of Grand Total Stand.

Province and Region.	Conifers.			Broad-Leaved.			Totals.		
	Saw Material.	Small Material.	Total Equivalent in Standing Timber.	Saw Material.	Small Material.	Total Equivalent in Standing Timber.	Saw Material.	Small Material.	Total Equivalent in Standing Timber.
Accessible.	million feet b.m.	'000 cords.	million cubic feet.	million feet b.m.	'000 cords.	million cubic feet.	million feet b.m.	'000 cords.	million cubic feet.
Prince Edward Island..	100	700	104	20	100	14	120	800	118
Nova Scotia...........	4,854	23,182	3,775	1,170	5,805	808	6,024	28,987	4,583
New Brunswick........	5,657	48,070	6,863	3,944	15,737	2,359	9,601	63,807	9,222
Quebec................	52,175	277,300	43,871	8,565	88,750	10,307	60,740	366,050	54,177
Ontario................	23,620	251,175	34,560	9,640	105,820	12,163	33,260	356,995	46,724
TOTALS, EASTERN PROVINCES...............	*86,406*	*600,427*	*89,173*	*23,339*	*216,212*	*25,651*	*109,745*	*816,639*	*114,824*
Manitoba.............	1,045	9,645	1,357	1,620	19,110	2,170	2,665	28,755	3,528
Saskatchewan..........	4,085	12,865	2,400	2,825	46,260	5,013	6,910	59,125	7,413
Alberta...............	7,000	74,400	10,238	2,080	36,000	3,876	9,080	110,400	14,113
TOTALS, PRAIRIE PROVINCES...............	*12,130*	*96,910*	*13,995*	*6,525*	*101,370*	*11,059*	*18,655*	*198,280*	*25,054*
British Columbia......	116,508	91,470	30,123	405	790	143	116,913	92,260	30,266
Totals, Accessible.....	**215,044**	**788,807**	**133,291**	**30,269**	**318,372**	**36,853**	**245,313**	**1,107,179**	**170,144**
Totals, Inaccessible...	**171,673**	**503,268**	**88,785**	**8,264**	**136,192**	**14,727**	**179,937**	**639,460**	**103,512**
Grand Totals.....	**386,717**	**1,292,075**	**222,076**	**38,533**	**454,564**	**51,580**	**425,250**	**1,746,639**	**273,656**

Section 4.—Noxious Forest Insects and Their Control.*

A sound appreciation of the losses caused by forest insects over any given period of time cannot always be confined to an estimate of damage to productive forests alone. Insect outbreaks in inaccessible stands may have an important bearing on the fate of commercial forests. Their significance must be calculated in terms which it is next to impossible to define. Furthermore, it is a common practice to evaluate insect damage by a measure of dead or dying stands and to ignore the depreciation entailed by the ravages of insects which actually do not kill the timber but merely render it unfit for profitable utilization. Loss of increment resulting from repeated attacks of defoliators is hardly, if ever, taken into consideration. The same may be said of loss of vitality, the effects of forest depletion on the so-called forest influences, the deterioration of fire-killed timber and of logs left in the woods. Increased fire risk in insect-killed stands, damage to stored stock, and even to manufactured articles, as well as a number of other factors should be taken into account to give a true idea of the destructive role played by insects affecting forests and forest products.

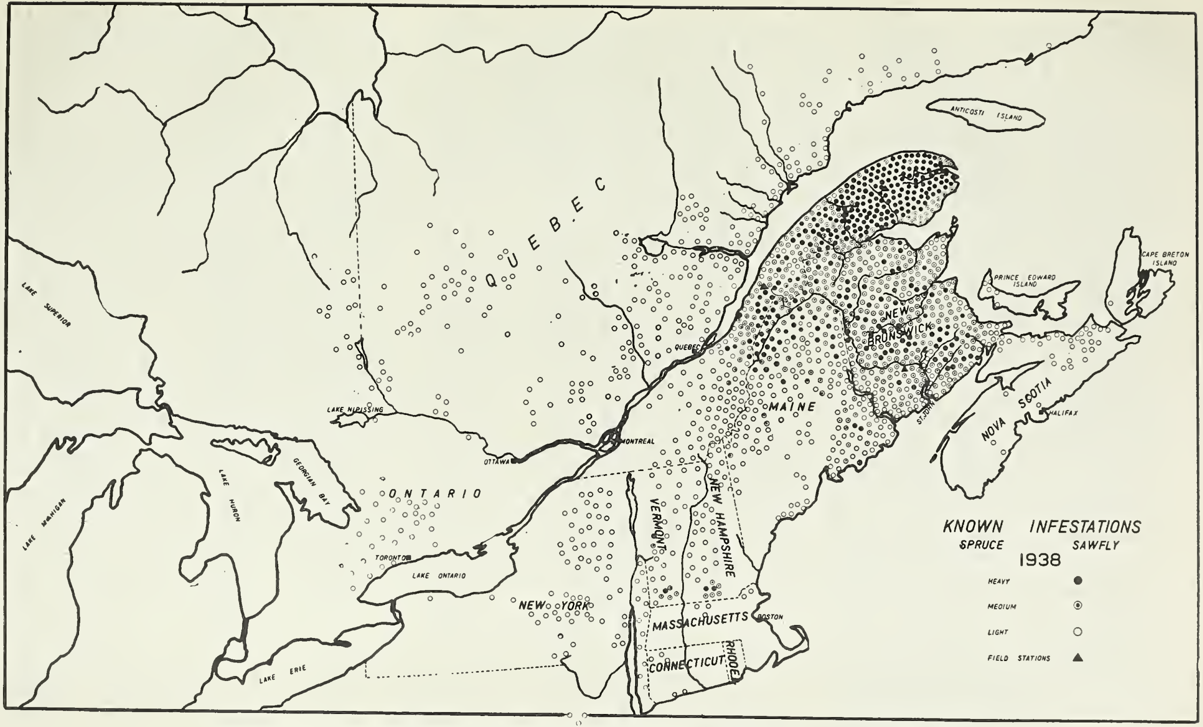
The losses thus sustained in Canada during the past fifty years, if they could be at all accurately computed, would no doubt be appalling. Classical examples of large-scale insect calamities are the larch saw-fly outbreak that some years ago destroyed practically all commercial larch stands in Eastern Canada, and the spruce bud-worm infestation with its toll of about two hundred million cords of spruce and balsam. The eastern spruce bark-beetle, the hemlock looper, the jack pine saw-fly, the black-headed bud-worm, the balsam woolly aphid, and several other species have all, at one time or another, appeared in destructive numbers over large areas. In some cases the changes brought about in the composition of the forest by insect outbreaks have been distinctly prejudicial to their commercial value since, the more useful species of trees having been replaced by less valuable ones, it may take centuries to repair such damage. In any event a merchantable forest crop, once lost, cannot be replaced in less than fifty to a hundred years.

The Depredations of the European Spruce Saw-fly and the Jack Pine Bud-worm in Canada.—At the present time, two outstanding outbreaks of forest insects are in progress in Canada, one caused by the European spruce saw-fly and the other by the jack pine bud-worm. The former is particularly important. In 1930 it was discovered that over an area approximately two thousand square miles in extent, situated in the Gaspe peninsula of the province of Quebec, the spruce trees had been severely defoliated by the larvæ of a saw-fly. Specimens submitted to specialists in the United States and in England were determined as *Diprion polytomum* Htg., a species native to Europe. By 1938 the area of heavy infestation had increased to approximately twelve thousand square miles and the insect was known to be present in greater or lesser numbers throughout Eastern Canada as far west as Sudbury, Ont., and in the United States as far south as New Jersey. (See the chart on p. 255.)

This saw-fly attacks all species of spruce grown in Canada. The larvæ feed principally on the old needles and usually do not attack the new growth until the supply of old needles has been exhausted. This peculiar feeding habit has the effect of retarding the decadence and death of infested trees and accounts for the comparatively small number of trees which have been killed in areas

---

*Prepared under the direction of J. M. Swaine, Ph.D., Director of Agricultural Science Service, by J. J. de Gryse, Ph. Cand. (Louvain), Chief, Forest Insect Investigations, Division of Entomology, Department of Agriculture, Ottawa.


KNOWN INFESTATIONS
SPRUCE SAWFLY
1938
HEAVY ●
MEDIUM ⊙
LIGHT ○
FIELD STATIONS ▲
QUEBEC
ONTARIO
MAINE
NEW BRUNSWICK
NOVA SCOTIA
NEW HAMPSHIRE
VERMONT
MASSACHUSETTS
CONNECTICUT
RHODE I.
NEW YORK
ANTICOSTI ISLAND
PRINCE EDWARD ISLAND
CAPE BRETON ISLAND
HALIFAX
ST. JOHN
BOSTON
QUEBEC
MONTREAL
OTTAWA
TORONTO
LAKE NIPISSING
GEORGIAN BAY
LAKE HURON
LAKE SUPERIOR
LAKE MICHIGAN
LAKE ONTARIO
LAKE ERIE

INFESTATIONS OF THE EUROPEAN SPRUCE SAW-FLY IN EASTERN NORTH AMERICA, 1938.

which are known to have been infested for several years. This ability of the tree to survive repeated attacks of the saw-fly is offset somewhat by the fact that the insect is exceedingly prolific, since its progeny consists almost exclusively of females, and mating is unnecessary for fertilization of the eggs. The saw-fly, moreover, is able to survive the most rigorous climatic conditions and, being of European origin, is almost completely free from attack by native insect parasites. The main natural control factors operating against it at present are small mammals, principally mice and shrews. These feed upon the cocoons in which the larvæ overwinter under the debris on the forest floor. Although perhaps between 40 and 50 p.c. of the cocoons may be destroyed yearly in this way, the ultimate measure of control effected by mammals, birds, native predacious and parasitic insects, is not sufficient to prevent a marked yearly increase in the intensity and spread of the infestation. From the beginning it was assumed that an insect which is favoured in so many ways by nature may constitute a very real menace to our spruce forests and the actual situation which has developed in recent years amply confirms this view.

Recent estimates of the damage show that, in the heavily-infested areas on the upper Cascapedia river, 24·8 p.c. of the volume of white spruce and 27·4 p.c. of the black spruce have been killed by the saw-fly. These figures do not include the mortality due to an apparently independent outbreak of the eastern spruce bark-beetle between 1931 and 1934. During this period 44·4 p.c. of the white and 5·6 p.c. of the black spruce were destroyed by the beetle, giving a total mortality for the region of about 69 p.c. of white and 33 p.c. of black spruce. In other parts, the mortality rates vary considerably from locality to locality. However, the number of trees actually killed by the saw-fly does not give a true appraisal of the situation; the probabilities of survival of the remaining trees constitute an equally, if not more, important factor. In many extensive areas in Gaspe and elsewhere the probability of recovery is gradually decreasing year by year and in the older centres of infestation it is virtually nil. Irrespective of local or seasonal fluctuations, it may be said that over the entire area in which the saw-fly occurs there has been a fairly steady yearly increase in extent and intensity of infestation since 1930. At the present time no one can safely predict what the future course of the outbreak will be. The known facts in the case are ample evidence of the seriousness of the situation and call for immediate, energetic action in an attempt to deal effectively with this dangerous pest.

While the European spruce saw-fly is gradually making inroads into the forests of Eastern Canada, the jack pine bud-worm, a native species, is appearing in outbreak form in northwestern Ontario and Manitoba. Although there can be no parity between the two infestations from the standpoint of actual or potential national and economic importance, the jack pine bud-worm presents a problem of the first rank for the lumber and paper industries in the affected territory. The centres of heaviest infestation are the extensive jack pine stands in the Quetico and Rainy River sections of the Great Lakes-St. Lawrence Forest Region. Lighter infestations have been found immediately north of these sections and westward as far as the eastern boundary of Saskatchewan. The trend of spread seems to be eastward. (See chart on p. 257.) Practically all the jack pine stands over an area of approximately sixty thousand square miles are involved to a greater or lesser extent.

The bud-worm is a biological race or strain of the notorious spruce bud-worm from which it differs in habits rather than in form. It exhibits such a marked preference for pine instead of spruce or balsam that from an economic standpoint it may be considered as a distinct species. The principal injury caused by the bud-

FOREST INSECT PESTS AND THEIR CONTROL.

One of the most effective means of controlling destructive forest insects at the present time is by the propagation and distribution of parasites. This method has been adopted with success in the case of the larch saw-fly and is now under test with the spruce saw-fly. These pests, together with the spruce bud-worm and the jack pine bud-worm, have caused tremendous damage to the forests of Eastern Canada. Other methods of control illustrated are: the use of 'predator' insects which prey on the pests, and artificial control by which poison dust is spread from the air.

The layout on the opposite side of this insert shows:—

European Saw-Fly.—(1) The effects of European saw-fly infestation in the Gaspe peninsula. (2) Enlarged view showing an adult ovipositing in a spruce needle. (3) Larvæ on a spruce twig.

Parasitic Control of the European Saw-Fly.—(1) A forest ranger placing a square cage containing parasites under a tree. The moss in his left hand will later be placed over the cage. (2) Greatly enlarged view of the adult of the European saw-fly parasite. (3) Adult laying its eggs in the cocoon of the European saw-fly. (4) Newly-formed pupæ of the parasite in the cocoon.

Predator.—A predator attacking a larva of the European saw-fly.

Artificial Control.—The most practical method of artificial control is by spreading poison dusts over the forest from aeroplanes. This means of control is restricted, however, under Canadian conditions.

Bud-Worm Pests.—(1) Defoliation of a jack pine by the bud-worm. (2) Stages in the development of the spruce bud-worm: (*a*) lateral view of the pupa; (*b*) views of the adult female; (*c*) larva at the fourth stage of development; (*d*) larva at the sixth stage of development.

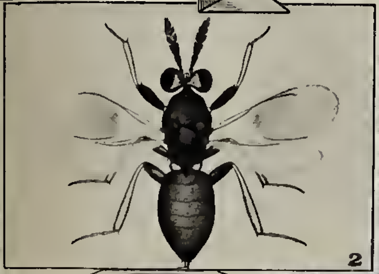
Secondary Insects.—Pine attacked by secondary insects—in this case *Ips pini* and *Monochamus confusor*—showing the deterioration of the wood.

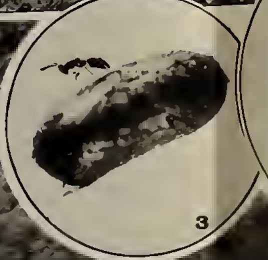
Courtesy, Division of Entomology, Department of Agriculture.

FOREST INSECT PESTS AND THEIR CONTROL

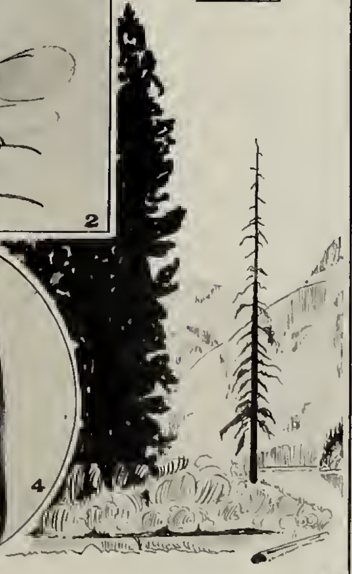
THE EUROPEAN SAW-FLY

PARASITIC CONTROL OF THE SAW-FLY



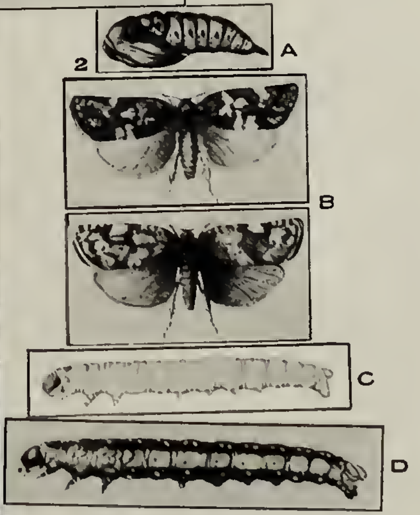


SECONDARY INSECTS

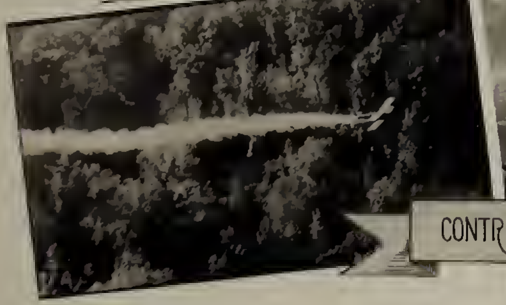


PREDATORS

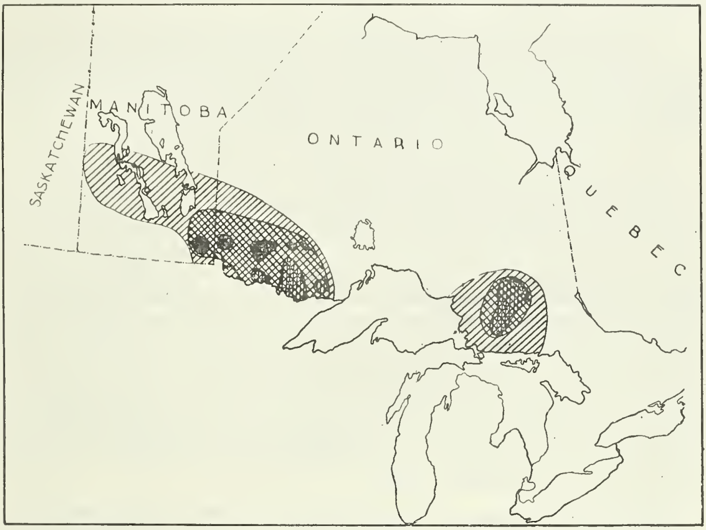
THE BUD-WORM (SPRUCE AND JACK PINE)



CONTROL BY DUSTING FROM THE AIR



worm consists in the defoliation of the host-tree. Usually the tops of the crowns suffer more severely than the lower parts, resulting in the formation of stag-heads which are a striking characteristic of infested stands. Repeated heavy defoliation or complete defoliation before the formation of the next year's buds is fatal. Although large trees are likely to succumb first, young trees growing under them are frequently killed by larvæ dropping from the older trees. Thus far, comparatively few trees have been killed outright, but the production of stag-heads is very general in heavily-infested stands and is likely to favour the entrance of rots and secondary insects which may ultimately either kill the tree or render it unfit for utilization except as firewood.



Areas Infected by Spruce Bud-worm and Jack Pine Bud-worm in Ontario and Manitoba (intensity of infection is shown by density of shading).

The outbreaks of the European spruce saw-fly and the jack pine bud-worm have been described somewhat in detail, because they constitute the most pressing problems at present and also because they will serve to illustrate the more important principles and practices adopted in dealing intelligently with emergencies of this kind.

The Approach to the Problems Involved.—The widespread, but fundamentally erroneous, belief that such insects as the spruce bud-worm, the spruce bark-beetle, the European spruce saw-fly, etc., are inherently noxious and that the sole reason for their existence is to cause calamities, should be deprecated at all times "in season, and out of season". In the natural order of things insects are part and parcel of that great economy commonly referred to as the "balance of nature". The forest is a vast biological unit composed of plants and animals; it is perpetually subject to changes through the succession of species and individual organisms competing with each other for a place in the sun, and its composition at any one point of time is the resultant of the complicated interaction of all its vegetational and animal components, itself again dominated by climatic and edaphic conditions.

In this intricate scheme of relationships insects play a dual regulatory role. Some, namely the herbivorous species, act upon the vegetation while others, endowed with carnivorous instincts, control the excessive multiplication of the first. Vegetarian insects may be roughly divided into two great classes: those which feed upon healthy, living trees and are therefore designated as primary; and those which attack only sickly, dead, or dying trees and, as such, are usually designated as secondary. Considered from the standpoint of man's economy, the primary insects are, potentially at least, the most injurious, and the majority of so-called destructive species are found among them. From the standpoint of nature's economy, they really act as useful protectors of those species whose existence becomes threatened by the undue dominance of others.

Generally speaking, secondary insects, by hastening the death of weakened trees or by contributing to the decomposition of dead trees, are useful agents in the regeneration of forests by the removal of trees which have reached the natural limit of their existence. The carnivorous insects comprise parasitic and predacious species that favour the vegetation by regulating the numbers of herbivores.

When, therefore, we refer to insects as pests or destructive enemies of the forest we speak in terms of human relationships and we forget that, more than often, man himself is the prime mover in the calamities which are visited upon him. Our knowledge of insect ecology is still very imperfect and it would be absurd o pretend that all the causal relationships underlying the rise and fall of any one insect outbreak can be determined. However, the fixing of man's responsibility is, in many cases, a comparatively simple matter. Improvident and reckless exploitation, ill-planned reforestation, destruction of wild life, fire, and the importation of insect species from foreign lands are broad categories under which man's offences may be readily classified. In planning measures of prevention and control, our first concern must be the regulation of man's activities and the correction of his mistakes. In some cases, appropriate legislation is the only course, in others the education of the individual will be more effective. In any event, whether legislative or educational procedure be adopted, it should at all times be based upon as thorough a knowledge of basic facts as it is possible to obtain.

Dominion Government Organizations for Dealing with Entomological Problems.—The study of forest insect problems in Canada is entrusted to the Forest Insect Investigations unit of the Division of Entomology, Science Service, Department of Agriculture. Forest entomology, as distinct from other phases of entomology, became a special section of the Dominion Entomological Service in 1911 and was formally established as a division in 1916. In the course of the recent general reorganization of the Department of Agriculture, forest entomology was ranked as a unit or section of the Division of Entomology. The headquarters of this service is in Ottawa and laboratories are maintained at Ottawa, Ont.; Fredericton, N.B.; Winnipeg, Man.; Indian Head, Sask.; and Vernon, B.C. Sub-laboratories are operated at Berthierville, Que.; Laniel, Que.; the Petawawa Forest Experiment Station at Chalk River, Ont.; and Vancouver, B.C. Temporary field stations and camps exist at a number of places throughout the Dominion. The personnel engaged in forest entomology consists of 17 permanent employees, 37 temporaries, and a small number of labourers who are hired whenever need for their services arises. The greater part of the permanent staff consists of officers specially trained in entomological research. The work accomplished by the unit may be classified under three headings: surveys, fundamental studies, and emergency projects.

METHODS OF CONDUCTING SURVEYS.—Surveys constitute a basic requirement in the development of fundamental studies and the treatment of emergencies. Not only are they indispensable in the timely discovery of incipient outbreaks, but they furnish a systematic inventory of assets as well as liabilities in the rational management of the forest insect fauna. In view of the enormous expanse of territory to be covered, any survey system for intelligence on forest insects must rely on the close co-operation of all parties interested in forest conservation. An efficient organization of this kind has been in operation in Canada since 1936. Practically all the important government and commercial agencies concerned with forestry or forest exploitation take an active part, and extensive use is made of their personnel in the collection of information. The country has been divided into five regions roughly corresponding to some of the natural divisions of the forest. Eventually in each of these a central laboratory will serve as a clearing house for specimens and information received. The complete results for the entire Dominion are collated yearly at the Ottawa headquarters. At present the system is based on the collection of samples of live insects and the submittal of concise, pertinent reports by rangers and wardens. All specimens are reared at the various laboratories receiving them. A wealth of information on insect conditions, heretofore unavailable, has already been collected in this way and has served as a basis for further study and practical application in control operations. An idea of the progress made during the past three years may be gained from a comparison of the number of reports received. This is clearly shown in Statement I.

I.—NUMBERS OF SAMPLES TAKEN FOR THE FOREST INSECT SURVEYS, 1936-38.

Province and Item.	1936.	1937.	1938.
MARITIME PROVINCES—			
New Brunswick Forest Service	Nil	210	611
Nova Scotia Department of Lands and Forests	"	34	46
Private companies	"	195	145
TOTALS, MARITIME PROVINCES	Nil	439	802
QUEBEC—			
Quebec Forest Protection Service	33	1,266	1,149
Private companies	147	526	426
Forest Protective Associations	37	362	410
TOTALS, QUEBEC	217	2,154	1,985
ONTARIO—			
Ontario Forestry Branch	222	561	992
Private companies	8	39	63
TOTALS, ONTARIO	230	600	1,055
PRAIRIE PROVINCES—			
Manitoba Forest Service	1	1	65
Saskatchewan Department of Natural Resources	2	24	22
TOTALS, PRAIRIE PROVINCES	Nil	25	87
BRITISH COLUMBIA—			
British Columbia Forest Service	Nil	109	345
National Parks Branch	"	63	77
TOTALS, BRITISH COLUMBIA	Nil	172	422
Dominion Division of Entomology	36	215	644
Other Dominion Departments	13	16	21
Miscellaneous co-operators	29	82	101
GRAND TOTALS	528	3,703	5,117

The instruction of forest rangers on making observations and insect collections is an important phase of this work. Whenever possible short courses are given at various points during the winter or spring and these are supplemented by field demonstrations throughout the summer season.

Fundamental Studies.—Fundamental studies are designed particularly with a view to unravelling the mysterious maze of ecological relationships which underlie the fluctuations in insect populations. Although, at present, they are purely scientific in scope, there cannot be the least doubt that ultimately they will lead to eminently practical results in the prevention and control of insect outbreaks. The thorough investigation of the biotic and physical factors influencing insect behaviour and reproduction will eventually eliminate much that is now empirical and uncertain from the practice of forest entomology. The very intricacy of the problem makes it a long-term project requiring a detailed analysis of soils, sites, flora, fauna, and meteorology of the region studied. The two sub-laboratories at Petawawa and Laniel are engaged upon work of this kind: the first is concerned with forests under intensive management, the second with forests under more or less natural conditions.

Emergency Programs.—The last subdivision of activities in forest entomology is the one which deals with emergencies or, in other words, the problems of the hour. That it should have a more universal, popular appeal than the other two is readily understood. Sudden and spectacular outbreaks of insects, whether of local or country-wide importance, usually cause considerable alarm, and urgent appeals are made for immediate action. The entomologist must resort, at first, to his stock-in-trade, that is to say, to palliatives and remedies of more or less proved or even sometimes uncertain value. He must do as best he can and, in the meantime, make use of every opportunity to increase his knowledge and improve his methods. For this reason, any extensive operation in forest-insect control is always accompanied by a thorough-going study of the bionomics of the species involved. Control operations may be broadly classified as mechanical, chemical, silvicultural, and biological. Mechanical and chemical methods have only a limited application under conditions such as prevail in the Canadian forests. In nurseries, plantations, small parks and resorts, and in small-scale operations in the forest in the case of incipient outbreaks they have a definite place. In recent years some of them have been successfully employed in the control of bark-beetles by the burning of brood trees; in the prevention of injury from wood-borers by brushing over log piles and immersion of logs in water; in the reduction of hemlock-looper infestations by means of stomach poisons distributed from aeroplanes.

In our day and time, it is becoming increasingly evident that silvicultural and biological methods offer the true solution of the majority of our forest-insect problems.

Silvicultural Control.—The practice of silvicultural methods in the control of insects is beset with serious difficulties.

First among these is the fact that operators generally have not arrived at a realization of either the necessity or the advantages of rational silvicultural practices. In other words, they do not consider them profitable under the present conditions. This is no doubt due, primarily, to the fact that virgin stands are still available. As time goes on and as the depletion of our forests progresses, the present attitude towards silviculture in commercial forestry will gradually become altered, in fact, the industries are already looking for guidance in the management of their forests for continuous production. The second difficulty, knowledge of the factors involved, is, as yet, extremely rudimentary. One principle seems to be fairly well established, namely, that the application of cultural practices will neither be effective nor profitable in the prevention or reduction of insect infestations unless the conditions which are favourable to the growth of trees are also, at the same time, either unfavourable or less favourable to the development of insects. Experience has shown that, in many cases, such a mutual inverse relationship exists. But there are exceptions. Other generalizations concerning the composition of the stand, the influence of site, density, crown cover, age, cutting methods, etc., cannot be made without considerable caution. The case of each insect, of each tree species, of each locality needs to be investigated.

The control of the jack pine bud-worm, for instance, is, according to entomologists in the United States, a problem which distinctly belongs to the field of silviculture. It hinges on the regulation of staminate flower production and may be accomplished by maintaining fully-stocked stands of jack pine. Planted trees and natural reproduction growing under susceptible trees should be protected by the removal of the latter. Large-crowned, orchard-type trees or overmature, round-crowned trees are the types which produce staminate flowers in great quantity. Their pollen is the preferred food of the young bud-worm larvæ and therefore such trees are most susceptible to bud-worm attack. The above recommendations are based on a study of the jack pine bud-worm in Michigan; to what extent they will apply in Canada has not yet been fully determined.

Cultural practices have been recommended in the case of the spruce bud-worm, the white-pine weevil, the locust borer, and many other insect pests of the forest; very often, however, such recommendations cannot be immediately put into practice.

Biological Control.—On the other hand, most important advances have been made in biological control. Although the use of natural enemies, more particularly insect parasites and predators, in fighting destructive insects has been practised for centuries in many countries, it is only in comparatively recent years that this method of control has been placed on a scientific basis and applied on a large scale. The campaign against gypsy and browntail moths in the United States was largely responsible for this development in entomology.

Biological control has been used almost exclusively in dealing with insects accidentally imported from other countries. This was a most logical deduction from the realization that introduced insects constitute a special menace by the very fact that they are free from the parasites and predators which help in keeping them in check in the country of their origin and that, usually, they are quite immune from attack by native species. In Canada the importation and propagation of foreign parasites have produced gratifying results. The European Lecanium scale and the satin moth have been successfully combated and a considerable measure of control has apparently been achieved in some areas by the introduction of parasites against the European larch saw-fly. It was only natural, therefore, that when the problem of the European spruce saw-fly arose, the importation of suitable parasitic species was resorted to at once. The seriousness of the situation fully warranted the expenditure of all the effort put forth in an attempt at stemming the progress of the saw-fly. In this work the forest entomologists co-operate closely with the Dominion Parasite Laboratory at Belleville, Ont. This laboratory is one of the most modern institutions of its kind in the world. It is adequately equipped for the importation, propagation, and liberation of parasites in large numbers. The following statement shows the number of parasites liberated against the European spruce saw-fly since 1933.

II.—LIBERATIONS OF SPRUCE SAW-FLY PARASITES, BY PROVINCES, 1933-38.[1]

Province.	Number.
New Brunswick	98,673,428
Nova Scotia	1,981,207
Ontario	6,696,881
Quebec	134,851,037
Total	242,202,553

[1] These figures were supplied by the Belleville Laboratory.

Of this total, 241,009,757 individuals belonged to a single species, *Microplectron fuscipennis*. This parasite and a species of *Exenterus* have succeeded in establishing themselves in Canada and have distinct possibilities of becoming a significant factor in control. Two other species also show promise of becoming established. In all, some 23 species have been tested to date and, although many of them have not yet been recovered in the field since the day of their liberation, this should not be interpreted too readily as being a sign of absolute failure.

The extensive use of insect parasites in the control of introduced pests constitutes in itself an argument for further investigation of similar practices in dealing with certain native species. Several lines of endeavour are more or less clearly indicated. Among others are: the study of the effect of species already introduced; new introductions for specific purposes, especially when it appears that native parasites are not adequate; and also more intensive studies of our native parasitic fauna and of methods by which its present effectiveness might be increased. Some steps have already been taken in this direction and it may be reasonably expected that, in years to come, this phase of biological control will become increasingly important in the field of applied entomology.

Control of Importation.—The realization that "an ounce of prevention is better than a pound of cure" is of particular value in dealing with foreign pests. For this reason, the Plant Protection Division of the Department of Agriculture exercises continual, unrelenting vigilance over the importation of plants and plant products from other countries. The function of this Division is well summarized in Regulation 1 of the Destructive Insect and Pest Act —

> All trees imported are subject to the requirement of a permit issued by the Secretary of the Destructive Insect and Pest Act Advisory Board. The importations must enter through one of several ports of importation established in Canada, and in addition to being accompanied by a certificate of inspection from the country of origin, are subject to reinspection on arrival in Canada either at the port of importation or after delivery to the premises of the importer. No importations may be released from customs without authority under the above Act involving an inspection or clearance certificate issued in Canada, in addition to the permit.

Special regulations are drafted whenever new emergencies arise and are so designed as to ensure as complete protection as is humanly possible against the introduction of dangerous insects and diseases into Canada. Several important interceptions of forest pests have been made from time to time under these regulations.

Salvage of Affected Timber.—Finally, no account of activities in forest entomology would be complete without a word about salvage. No matter how efficient the organization for combating forest insects may become, it will always be necessary to devise ways and means for the profitable utilization of timber damaged in the course of infestations. Under present conditions, forest entomologists are required to give advice on salvage in connection with almost every infestation of importance. Full information concerning the present and future state of the forest is required as the basis for cutting plans whereby losses due to insects may be reduced to a minimum. To make pronouncements in such matters places a very grave responsibility upon the entomologist and requires a knowledge of all important factors in the development of outbreaks.

In the case of the European spruce saw-fly, for instance, the Forest Service is often asked: whether or not the spruce in a certain area will eventually be killed; how soon the trees will begin to die; what proportion of each species, type, or age class will be killed; how soon cutting operations should be commenced; and what effect these will have on the remaining forest. The answers to these questions cannot be given in a general way; it is necessary to study each area individually and to determine the condition of the spruce, the severity of the attack, the probable rate at which the infestation will develop in the near future, as well as the rate of deterioration of the timber subsequent to death from insect attack. In the collection of data, the co-operation of companies and forest services is indispensable. A regular system of reporting has been developed for this purpose. Special report forms have been prepared for those who wish to avail themselves of this service. Prognostications and recommendations are made on the basis of these reports, but it will be readily understood that exact measurements of probabilities are not always possible.

From the above it will be seen that in the conservation of our forest resources the proper management and control of the insect fauna plays a most important part, and at the same time that the task of the forest entomologist is by no means simple. The organization of an adequate service for the protection of the forests against insect ravages should be developed as rapidly as possible, especially through active and wholehearted co-operation between governments and industries.

Section 5.—Forest Administration.

Subsection 1.—Administration of Dominion and Provincial Timber-Lands.

In Canada the general policy of both the Dominion Government and the Provincial Governments has been to dispose of the timber by means of licences to cut, rather than to sell timber-land outright. Under this system the State retains the ownership of the land and control of the cutting operations. Revenue is derived in the form of stumpage bonuses (either in lump sums or in payments made as the timber is cut), annual ground rent, and royalty dues collected as and when the wood is removed. Both ground rent and royalty dues may be adjusted at the discretion of the Governments so that the public may share in any increase in stumpage values or reductions may be made in the rates if conditions demand them.

The Maritime Provinces did not adopt this policy to the same extent as did the rest of Canada. In Prince Edward Island practically all the forest land has been alienated and is in small holdings, chiefly farmers' woodlots. In Nova Scotia 87 p.c. of the forest land is privately owned; nearly half of this is in holdings exceeding 1,000 acres. In New Brunswick over 50 p.c. has been sold, and 20 p.c. is in holdings exceeding 1,000 acres. The percentage of privately-owned forest land in the other provinces exclusive of National Parks and Indian reserves is as follows: Quebec, 8 p.c.; Ontario, 3·3 p.c.; Manitoba, 9·1 p.c.; Saskatchewan, 7·6 p.c.; Alberta, 7·7 p.c.; and British Columbia, 8·4 p.c. In all cases timber-lands are now administered by the provinces in which they lie. As new regions are explored their lands are examined and the agricultural land disposed of. Absolute forest land is usually set aside for timber production, and the policy of disposing of the title to lands fit only for the production of timber has been virtually abandoned in every province in Canada. The ownership of forests by towns and communities, so common in Europe, is now beginning in Canada. Efforts are being made, especially in Quebec and Ontario, to encourage the establishment and maintenance of forests on this basis.

The administration of forest lands under Dominion control and those under the control of each of the provinces is reviewed below.

Forest Lands Under Dominion Control.—The forests under Dominion control are administered by the Department of Mines and Resources. The National Parks Bureau has charge of the National Parks, the Lands Registry Office administers the timber in Yukon and the Northwest Territories, and the Indian Affairs Branch administers, in trust for the Indians, the timber within their reservations. The Dominion Forest Service has charge of the Forest Experiment Stations.

Forest Lands Under Provincial Control.—*Nova Scotia.*—In this province, 10,473 square miles, about 87 p.c. of the forest land, is privately owned. The Crown timber is administered by the Minister of Lands and Forests, with a Chief Forester in charge of protection, surveys, etc. Timber-cutting leases are granted by special agreements.

New Brunswick.—The Forest Service, under the Department of Lands and Mines, administers the forests in New Brunswick. At present timber-lands are disposed of as in the other provinces, but in the past several grants of forest land were made to railway companies, private concerns, and individuals, who now own in fee simple about 11,100 square miles of forest land.

Quebec.—The Forest Service of the Department of Lands and Forests administers the timber-lands in Quebec. Its powers include classification of land, disposal of timber, and regulation of cutting operations. Since 1924 forest protection has been under a separate organization, the Forest Protective Service. Licences are granted after public competition and are renewable from year to year, subject to changes in royalty by the Government at any time. Grants of land in fee simple, made in some cases under the French *régime* in Quebec, are responsible for the private ownership of about 31,048 square miles of forest land. Forest reserves cover 31,922 square miles and provincial parks 5,138 square miles.

Ontario.—Forest administration is carried out in Ontario by the Department of Lands and Forests, under a Minister, Deputy Minister, and Provincial Forester. In recent years the sale of saw timber has been by tender after examination, with conditions covering the removal within a specified period, disposal of debris, etc. Much of the merchantable timber is at present held under licences granted in the past and renewable indefinitely. Pulpwood areas are usually disposed of by individual agreements for longer periods than in the case of saw timber. The licensees usually undertake to erect a pulp-mill or a paper-mill within the province, the type and size of mill being stipulated in the agreement. In this province about 7,972 square miles of forest land have been disposed of outright. Provincial forest reserves cover 19,606 square miles, and the provincial parks 4,248 square miles.

Manitoba.—The Forest Service of the Department of Mines and Natural Resources, has administered the forests of Manitoba since 1930. A provincial Air

Service is operated under the direction of the Provincial Forester, and is mainly used for purposes of forest fire protection. Six forest reserves, containing 3,775 square miles, are permanently reserved for the production of forest products. Timber is disposed of by licence or timber sale, and large numbers of timber permits, covering small quantities of wood, are issued annually to settlers and others. One pulp and paper mill is in operation in the province. The area of privately-owned forest land is estimated to be 8,500 square miles.

Saskatchewan.—The forests of Saskatchewan are administered by the Department of Natural Resources. The organization is unique in Canada, because the different resources are not controlled by different branches of the Department. Instead, each field officer handles matters pertaining to all resources within his district. Forestry affairs of the Department are controlled by the Director of Forests. Timber disposal is carried out under licence, sale, and permit. An Air Service is maintained, mainly for forest protection purposes. Forest reserves occupy 10,003 square miles and provincial parks 258 square miles. Privately-owned forest land is estimated to be 6,250 square miles.

Alberta.—The Forest Service of the Department of Lands and Mines administers and protects the provincial forests. Timber is disposed of through licences and permits except on forest reserves, where timber sales are disposed of but licensed berths are not. The area in forest reserves is 14,316 square miles, and 10,044 square miles of forest land are privately owned.

British Columbia.—In the province of British Columbia, the Forest Branch of the Department of Lands has administered timber-lands since 1912. All unalienated lands in the province which are found to be better suited to forest than to agricultural production are dedicated to the former purpose, and all timber-lands carrying over a specified quantity of timber are withdrawn from disposal until examined by the Forest Branch. During the past few years 26,739 square miles have been set aside permanently for forest purposes. Provincial parks include 8,252 square miles. The present practice is to sell cutting rights for a stated period by public competition but licences to cut, which are renewable annually in perpetuity, have been granted for a large proportion of the accessible timber. The royalties are adjusted periodically on the basis of prevailing industrial conditions. About 15,000 square miles of timber-land are privately owned.

Subsection 2.—Forest Fire Protection.

The protection of forests from fire is undoubtedly the most urgent and most important part of the work of the different agencies administering forest lands in Canada. Except for the forests of the National Parks, the Forest Experiment Stations, and the Northwest Territories and Yukon, which remain under Dominion control, the administration of forest lands now rests with the provinces. Up to the end of the fire season of 1930, the Forest Service of the former Dominion Department of the Interior was responsible for fire protection in the prairie provinces of Manitoba, Saskatchewan, and Alberta, and the Railway Belt of British Columbia. However, by reason of the transfer of natural resources from Dominion to provincial control, their administration is now a matter of provincial concern.

Each of the Provincial Governments, except that of Prince Edward Island, maintains a fire protection organization co-operating with owners and licensees for the protection of all timbered areas, the cost being in part distributed or covered by special taxes on timber-lands. In each province, with the exception just mentioned, provincial legislation regulates the use of fire for clearing and other legitimate purposes, and provides for close seasons during dangerous periods. An interesting development in this connection in the province of Quebec is the organization of a number of co-operative protective associations among lessees of timber limits. These associations have their own staffs which cö-operate with those of the Board of Railway Commissioners and the Provincial Government. The latter contributes money grants and also pays for the protection of vacant Crown lands lying within the area of the associations' activities.

In the matter of forest fire protection along railway lines, the provincial services are assisted by the Dominion Railway Act administered by the Board of Railway Commissioners. This Act gives to that body wide powers relating to fire protection along railway lines under its jurisdiction in Canada. Certain officers of the various forest authorities are appointed *ex officio* officers of the Board of Railway Commissioners. These officers co-operate with the railway fire-ranging staffs employed by the various railway companies, the compulsory control of all lines coming under the jurisdiction of the Board being one of the requirements of the Dominion Railway Act.

The most important single development of late years in forest fire protection has been the use of aircraft for the detection and suppression of incipient forest fires. Where lakes are numerous, flying boats can be used for detection and for the transportation of fire fighters and their equipment to fires in remote areas. Specially developed aircraft equipped with wireless are employed on forest fire-protection operations; these enable the observer to report the location of a fire as soon as it has been detected. As a general rule, aircraft are used in the more remote districts, while lookout towers, connected by telephone lines or equipped with wireless, are established in the more settled and more travelled forest areas. While these agencies have to a large extent supplanted the old canoe, horseback, and foot patrol for the detection of fires, a large ground staff with its equipment stored at strategic points will always be necessary for the fighting of larger fires. A ground staff is also necessary for the maintenance in the forest of fire lanes, fire guards, and systems of communication and transportation.

The most important improvement in forest fire-fighting equipment has been the portable gasoline pump. These pumps, each of which weighs from 45 to a little over 100 pounds, can be carried to a fire by canoe, motor boat, automobile, aircraft, pack-saddle, or back-pack. They can deliver efficient water pressure as far as seven thousand feet from a water supply and, when used in relays, to a much greater distance. Small hand pumps supplied by 5-gallon portable containers are also used effectively in many cases.

In addition to these improved measures, the enactment of legislation has tended to reduce the fire menace. The establishment of close seasons for brush burning, and seasons during which permits are required for setting out fires and for travel in the forest during dangerous dry periods, have been of enormous value as preventive measures.

Since its beginning in 1900, the Canadian Forestry Association has played an important part in securing popular co-operation in reducing the fire hazard. By means of its magazine which has a circulation of over 16,000, by railway lecture cars and motor trucks provided with motion picture equipment, and by co-operation with radio broadcasting stations and the press, the Association reaches a large proportion of the population of the Dominion. Special efforts are made through the schools, by specially appointed junior forest wardens and other means, to educate the younger generation as to the value of the forests, the devastation caused by fire, and the means of preventing such destruction.

Prepared lectures illustrated by slides and films are distributed to volunteer lecturers and other educational work is carried on in schools and at public meetings. The various governmental forest authorities also carry on forest conservation publicity work independently and in co-operation with the Canadian Forestry Association.

Another important advance in forest protection is the development by the Dominion Forest Service of methods for the daily measurement of the actual degree of forest fire hazard which is expressed in the form of an index computed from the weather factors. In the forest types and regions in which the necessary research has been completed the forest authorities are able, not only to gauge the trend of increasing hazard at any given time, but, by the aid of weather forecasts, they can anticipate the trend one or two days in advance and so regulate their activities to meet hazardous conditions as they develop.

Subsection 3.—Scientific Forestry.

Up to the present, the practice of forestry in Canada has consisted chiefly in the administration and protection of existing forest areas. About 35 square miles is now being planted out annually, largely in connection with farmers' woodlots, shelter belts, and reclamation work, while several commercial reforestation projects have been carried on by paper companies and by Provincial Governments on denuded Crown lands. The great forestry problem in Canada, however, is the management of Crown forests, first under provisional and later more intensive working plans, so as to ensure a sustained yield. To this end, forest research activities are now assuming great importance. Silvicultural investigations are receiving marked attention both from the Dominion services and some of the provincial services.

About 400 technically-trained foresters are employed by the Dominion or provincial forest services or by paper and lumber companies. A considerable number of foresters are actively engaged in commercial logging operations. In addition to administrative work, these men carry on forest surveys either for the estimation of timber stands and making of maps, or to determine natural growth and reproduction conditions and factors. Aircraft are now being used extensively for exploring remote areas and mapping forest lands by means of aerial photography. Waste lands and the various forest types can be mapped more accurately and more economically by this means than by ground surveys.

Dominion Forest Service.—The activities of the Dominion Government in forest research are centred in the Dominion Forest Service, which is a bureau of the Lands, Parks, and Forests Branch of the Department of Mines and Resources. Until the time of transfer of the natural resources of the Prairie Provinces, and the Railway Belt and Peace River Block in British Columbia, to provincial control in 1930, the Forest Service was primarily concerned with the administration of forest reserves and the protection from fire of all forests on Crown lands. In addition silvicultural research work had been carried on at the Petawawa Experiment Station in the Ottawa valley since 1918. Since the transfer of the resources, the Service has been entirely devoted to investigations in the fields of forest economics, silvicultural research, forest protection research, and forest products research.

In co-operation with the provincial forest authorities, the Forest Service assembles the available information respecting the forest resources of the Dominion in order to prepare a national forest inventory. Such material is revised every five years and published in reports entitled "The Forests of Canada", which are submitted to the quinquennial British Empire Forestry Conferences. Besides giving assistance to certain provinces in the preparation of their inventories, the Service is developing improved methods in interpreting the valuable forestry data contained in aerial photographs. The Economics Division also assembles data and issues reports on forest revenues and expenditures, the production of forest industries, the employment of labour, and trade in forest products.

Five forest experiment stations, where investigations of the underlying principles governing the growth of forests can be made, and where practical methods of management can be tested, are now in operation. Besides the original station at Petawawa, new establishments, opened since 1930, include the Acadia station near Fredericton, N.B.; the Valcartier station near Quebec; the Duck Mountain station in Manitoba; and the Kananaskis station in the foothills west of Calgary. The total area of the five stations is approximately 238 square miles. These stations or experimental areas, are used for forest fire-hazard research as well as for silvicultural work, and also form centres from which investigations can be conducted in other areas in the regions in which they are located.

One of the principal problems now exercising the minds of all who are interested in the future welfare of our forest resources concerns the present condition and future prospects of forest areas which have been cut or burned. The Forest Service is conducting a special series of investigations into this question in co-operation with the provinces and timber owners.

Forest Products Laboratories.—In order to promote the more efficient use of the forest resources of Canada and at the same time assist the wood-using industries in the more technical problems encountered in their manufacturing operations, the Forest Products Laboratories of Canada were organized in 1913 under the Forest Service of the former Department of the Interior. The need for them was felt because of the influence of the establishment of such laboratories in other important timber-growing countries. Besides, on account of Canada's large exports of timber and timber products, it became increasingly apparent that, in order to meet world competition in the timber trade, it was necessary that Canada keep fully abreast of other countries in scientific developments in wood utilization.

For several years the Laboratories carried on all their work in Montreal, under an arrangement with McGill University. The subsequent development of their work has necessitated the establishment of a branch laboratory in Vancouver in a building provided by the University of British Columbia, the transfer of the main laboratories to Ottawa, and the establishment of the Pulp and Paper Division of the Laboratories in Montreal in a building erected by the Canadian Pulp and Paper Association. In this building are also housed the executive offices of the Association and certain laboratories of McGill University devoted to research in cellulose and related products. The Pulp and Paper Association, in addition to providing accommodation makes a yearly grant to the Laboratories to assist in financing the work, and through a Joint Administrative Committee, consisting of representatives of the Government and the Association, takes an active part in formulating and forwarding the work of the Division. Close co-operation is also maintained with McGill University.

The main laboratories in Ottawa carry out work in timber mechanics, wood fabrication, wood preservation, lumber seasoning, timber pathology, wood structure, wood identification, wood chemistry, and general wood utilization; they also co-operate with other Government Departments and industrial organizations in timber marketing problems. In addition, the Ottawa Laboratories carry out many investigations in connection with logging problems of the pulp and paper industry.

The Vancouver Laboratory devotes attention to special problems relating to Pacific Coast timbers which require local treatment and which cannot be carried out to advantage in the main laboratories on account of distance or for other reasons.

A research committee of the Canadian Lumbermen's Association was set up several years ago to effect liaison between the industry and the Laboratories and make as effective as possible the application of researches carried out by the Laboratories in the problems of the lumber industry.

Since the Laboratories were established, many advances have been made in the technique of wood utilization. Improvements have been made in treating railway ties, telephone poles, mining timbers, and other structural timbers with creosote, water-soluble salts, and other chemicals. This has enhanced the value of wood as a permanent structural material and permitted its use for a variety of purposes for which it is otherwise unsuitable. The work carried out in the treatment of hardwoods, especially birch, beech, and maple, has been of particular value. Reductions in the cost of manufacture of pulp and paper, and improvements in quality of products have resulted from researches of the Laboratories. Of particular interest has been the development in the Pulp and Paper Laboratory of the Canadian Standards Freeness Tester and the Johnston Fibre Classifier. Valuable work has also been carried out in the manufacture of groundwood pulp and in the pulping of resinous woods and hardwoods.

The study of the significance of discoloration in timber, as for example in jack pine, red cedar, and Douglas fir, has been responsible to a considerable degree in curtailing rejection of such material. Researches carried out in the spraying or dipping of timber, notably the sapwood of the pines, with chemicals which are toxic to wood-staining organisms have assisted in curtailing losses on this account, which in some years amounted to as high as one million dollars.

Through researches carried out in the Laboratories and at wood-working plants important advances have been made in seasoning both in the open air and in experimental dry-kilns. This work has been particularly valuable in both Eastern and Western Canada in connection with export markets which are becoming increasingly critical of specifications. The work carried out has been of significance to exporters of both softwoods and hardwoods.

Mechanical and physical tests have been carried out on nearly all important Canadian commercial species of timber according to practices which have been adopted by laboratories of countries of the British Empire and of the United States. A great deal of work has also been carried out on large structural timbers. This information has been widely used by Canadian engineers and by municipal authorities in the revision of building codes. It has also been made the basis for Canadian standard grades for all species of Canadian woods of structural importance which have been set up by the Canadian Engineering Standards Association. In logging operations in Canada a great deal of material such as limbs, small logs, defective logs, and species not ordinarily used commercially are left in the woods and wasted. At the sawmills quantities of bark, slabs, edgings, sawdust, and trim are consumed in refuse burners. The Laboratories are paying special attention to devising ways and means for curtailing this waste, and industry is becoming keenly aware of the importance of such work in view of keen competition for their products in export markets.

Close co-operation is maintained between the Laboratories and the Commercial Intelligence Service of the Department of Trade and Commerce through its Trade Commissioners. The Laboratories also co-operate closely with the Dominion Department of Public Works in all its timber structures and with other Dominion Departments, notably Agriculture, National Defence, and Transport; also with Canadian railway companies and other large public utility organizations.

Universities and Other Agencies.—Education in forestry and opportunities for research are offered by four Canadian universities. The University of Toronto, the University of New Brunswick, and the University of British Columbia provide four-year courses leading to a professional degree. The School of Forestry and Surveying in connection with Laval University at Quebec provides, in the French language, a combined course of four years duration leading to diplomas in both sciences. The Government of Quebec has established a school in paper-making at Three Rivers in the heart of the paper industry; several agricultural colleges provide short courses in farm forestry and a school for forest rangers has been established at Duchesnay by the Quebec Forest Service.

A provincial forest experiment station of six square miles is maintained by the Quebec Forest Service at Duchesnay, near Quebec city, and the British Columbia Forest Branch has four such stations, totalling fourteen square miles and located at Aleza lake, Campbell river, Cowichan lake, and Green Timbers.

The practice of forestry by individuals and private concerns is encouraged by the furnishing of expert advice by Dominion and provincial services and by the distribution of tree-planting material. The Dominion Department of Agriculture maintains two nurseries in Saskatchewan, one at Indian Head and the other at Sutherland, near Saskatoon. Over 7,000,000 trees are distributed annually to farmers and ranchers in the Prairie Provinces for planting woodlots and windbreaks. If certain conditions are fulfilled, the material and instructions are provided free except for transportation charges. A total of over 150,000,000 trees has been distributed.

The province of Ontario provides material under similar conditions and distributes to woodlot owners at least 7,000,000 trees annually from its 3 nurseries. As many more are being provided for the creation of county forests, demonstration forests and plantations on denuded Crown lands. To encourage the establishment of communal forests by towns and other municipalities, the Provincial Government undertakes to plant, free of charge, any area purchased by the municipality for this purpose. The Government also assists counties that purchase areas of not less than 1,000 acres of land for forest purposes. As a result of these inducements there are at present, scattered throughout the province, 50 communal forests (owned by municipalities) and 12 of the larger county forests. Mention should also be made of the 271 demonstration plots or woodlots, bordering on highways. These are supervised by the Forestry Branch for public educational purposes. Farm land used for forestry purposes, while so used, is exempt from taxation up to 10 p.c. of the total farm area but not exceeding a total of 20 acres.

In Quebec, a forest nursery at Berthierville serves as a demonstration station for the School of Forestry. It provides trees for sale and distribution in the province, comprising seedlings and transplants for forest planting and larger trees for ornamental purposes. The capacity of the nursery is about 10,000,000 trees. Provision is made by legislation for the creation of communal forests and there are now 115 of these, covering 896,000 acres.

Section 6.—Forest Utilization.

A short historical sketch of forest utilization in Canada appears at p. 325 of the 1934-35 Year Book and an article on "The History of the Canadian Lumber Trade", by A. R. M. Lower, M.A., will be found at pp. 318-323 of the 1925 edition of the Canada Year Book.

Subsection 1.—Woods Operations.

Differences in forest conditions throughout Canada give rise to differences in logging methods. Generally speaking, throughout Eastern Canada the climate is such that the cutting and hauling of logs can be carried on most economically during the fall and winter months. The trees are felled and the logs hauled to the nearest stream or lake, where they are piled on the ice or sloping banks. The presence of connected systems of lakes and streams makes it possible in most cases to float the logs from the forest to the mill at a minimum cost during the annual spring freshets. The logging industry east of the Rocky mountains is, therefore, almost entirely seasonal. In many cases lumbermen co-operate in river-driving operations and improvement companies, financed by the logging operators, build river improvements to facilitate the passage of the floating logs, the logs being finally sorted and delivered to their respective owners. In British Columbia the scarcity of drivable streams and the greater average size of the logs give rise to entirely different logging methods. Logs are assembled by cable systems operated by donkey engines and are transported to the mills or to water chiefly by logging railways but in many cases by motor trucks. These operations are more or less independent of frost, snow, or freshet and are carried on in most cases throughout the entire year.

In Eastern Canada logging operations are usually carried on by the mill owners or licensees of timbered lands, often through the medium of contractors, subcontractors, and jobbers. In the better-settled parts of the country a considerable quantity of lumber is sawn by custom sawmills or small mills purchasing logs from the farmers. Unmanufactured pulpwood, poles, ties, and other forest products have a market value, but sawlogs, being as a rule the property of the mill owner, are not generally marketed as such in Eastern Canada. In British Columbia logging is carried on more frequently as a separate enterprise by limit-holders, who cut and sell logs on the market. In many cases mill operators are not limit-holders but buy their entire supplies of raw material from logging concerns.

In connection with operations in the woods it should be borne in mind that the forests not only provide the raw material for the sawmills, pulp-mills, wood distillation, charcoal, excelsior, and other plants but that they also provide logs, pulpwood, and bolts for export in the unmanufactured state, and fuel, poles, railway ties, posts and fence rails, mining timber, piling, and other primary products, which are finished in the woods ready for use or exportation. There are also a number of minor forest products, such as Christmas trees, maple sugar and syrup, balsam gum, resin, cascara, moss, and tanbark, which all go to swell the total.

Table **2** gives the total values of the products of woods operations in Canada for the years 1932 to 1936, inclusive. The exports and imports of forest products in the fiscal years ended Mar. 31, 1935-38, are shown in Tables **12** and **13** of the chapter on External Trade.

2.—Values of Woods Operations, by Products, 1932-36.

Product.	1932.	1933.	1934.	1935.	1936.
	$	$	$	$	$
Logs and bolts	18,029,759	23,158,381	29,115,515	34,077,938	44,827,957
Pulpwood	36,750,910	33,213,973	38,302,807	41,195,871	48,680,200
Firewood	30,627,632	31,141,104	31,489,524	31,864,500	32,167,410
Hewn railway ties	1,353,664	1,370,750	1,541,901	3,188,651	3,190,052
Poles	1,411,209	963,951	1,091,046	1,359,736	1,563,681
Round mining timber	809,700	841,982	954,059	997,357	1,102,255
Fence posts	990,568	969,291	988,884	976,402	1,008,178
Wood for distillation	251,281	342,107	286,847	274,797	274,077
Fence rails	253,077	215,521	262,519	266,253	273,282
Miscellaneous products	1,628,452	1,556,082	1,506,630	1,260,274	1,717,136
Totals	**92,106,252**	**93,773,142**	**105,539,732**	**115,461,779**	**134,804,228**

It has been estimated that operations in the woods in Canada in 1936 involved the investment of $95,000,000 in logging equipment, gave employment for a part of the year equivalent to 90,000 man-years, and distributed over $54,000,000 in wages and salaries. In estimating the annual drain on our forest resources, certain converting factors have been used. Each of these factors represents in cubic feet the quantity of standing timber that must be cut in the forest to produce one unit of the material in question, based on the total cubic contents of the tree. By the use of these factors it has been estimated that the total drain on our forest resources in 1936, due to consumption for use, amounted to 2,702,766,000 cu. ft. of standing timber. To this total must be added the volume of material destroyed by fire, insects, and fungi, which would bring the average annual depletion to more than four billion cubic feet of standing timber. Table 3 gives the reported or estimated quantities of wood cut, by chief products, together with the respective converting factor, the equivalent in standing timber, and the estimated value in each case for 1936, with totals 1926-35. Table 4 shows the extent of the drain on our forest resources in 1935 and 1936, by provinces.

3.—Quantities of Wood Cut in Operations in the Woods in Canada, Equivalents in Standing Timber, and Total Values, by Chief Products, 1936, with Comparative Totals, 1926-35.

Product.	Quantity Reported or Estimated.	Converting Factor.	Equivalent Volume in Standing Timber.	Total Value.
			'000 cu. ft.	$
Totals, 1926	-	-	**2,838,106**	**204,436,328**
Totals, 1927	-	-	**2,865,303**	**204,937,750**
Totals, 1928	-	-	**2,988,038**	**212,950,799**
Totals, 1929	-	-	**3,090,615**	**219,570,129**
Totals, 1930	-	-	**3,056,930**	**206,853,494**
Totals, 1931	-	-	**2,306,144**	**141,123,930**
Totals, 1932	-	-	**1,882,228**	**92,106,252**
Totals, 1933	-	-	**2,027,714**	**93,773,142**
Totals, 1934	-	-	**2,299,547**	**105,539,732**
Totals, 1935	-	-	**2,440,809**	**115,461,779**
1936.				
Logs and bolts M ft. b.m.	3,996,898	219	875,321	44,827,957
Pulpwood cord	7,002,057	117	819,240	48,680,200
Firewood “	8,870,000	95	842,650	32,167,410
Hewn ties No.	5,858,994	12	70,308	3,190,052
Poles “	461,646	13	6,001	1,563,681
Round mining timber cu. ft.	5,988,147	1·3	7,784	1,102,255
Posts No.	15,008,913	2	30,018	1,008,178
Wood for distillation cord	49,855	123	6,132	274,077
Fence rails No.	4,929,610	3	15,315	273,282
Miscellaneous products cord	-	-	29,997	1,717,136
Totals, 1936	-	-	**2,702,766**	**134,804,228**

4.—Equivalent Volumes of Standing Timber Cut in Canada and Values of Products of Woods Operations, by Provinces, 1935 and 1936.

Province.	Equivalent Volumes in Standing Timber.		Values of Products.	
	1935.	1936.	1935.	1936.
	'000 cu. ft.	'000 cu. ft.	$	$
Prince Edward Island	12,212	12,550	506,954	520,483
Nova Scotia	122,105	121,446	6,006,233	6,199,647
New Brunswick	159,319	161,560	8,543,401	8,848,883
Quebec	850,443	931,505	41,268,620	47,417,044
Ontario	514,481	558,792	27,996,771	31,570,806
Manitoba	63,089	67,224	2,089,487	2,426,001
Saskatchewan	79,216	77,267	2,119,402	2,038,647
Alberta	104,597	101,474	3,073,760	3,048,013
British Columbia	535,347	670,948	23,857,151	32,734,704
Totals	**2,440,809**	**2,702,766**	**115,461,779**	**134,804,228**

Subsection 2.—The Pulp and Paper Industry.

The manufacture of pulp and paper is a comparatively recent development in Canadian industry. Paper was first manufactured in Canada about a hundred years ago but prior to 1860 no wood-pulp was used or produced. Rags, straw, esparto grass, cotton waste, and other substances were the raw materials used. The first paper-mill was established at St. Andrews in Quebec (then Lower Canada) in 1803 by United States citizens who obtained concessions from the seigneurs. Upper Canada's first mill, which is still in operation, was built in 1813 at Crook's Hollow (now Greensville) near Hamilton, and the Maritime Provinces entered the industry in 1819 with a mill at Bedford Basin near Halifax.

In 1866, Alexander Buntin installed at Valleyfield, Quebec, what is claimed to have been the first wood grinder in America and began the manufacture of wood-pulp by the mechanical process. During the same year Angus Logan and Co. built the first chemical wood-pulp mill in Canada at Windsor Mills in Quebec. During the next decade the use of wood-pulp in paper making was extensively developed and in 1887 Charles Riordon installed the first sulphite mill in Canada at Merritton in the Niagara peninsula; by the beginning of the century the output of the industry had exceeded $8,000,000. In 1907 the Brompton Pulp and Paper Co. built, at East Angus in Quebec, the first mill in America to manufacture chemical pulp by the sulphate or kraft process.

The gross output of the industry increased rapidly and steadily until the boom years following the Great War, when it jumped to a peak of over $232,000,000 in 1920. This was followed by a drop in 1921, after which there was a steady recovery, resulting in a second peak in 1929 of $243,970,761. This was followed by annual decreases down to 1933 and annual increases up to 1937.

The rapid development of this industry up to 1929 was due chiefly to the existence in Canada of abundant water powers adjacent to extensive forest resources of pulpwood species and an increasing demand for newsprint paper in the United

States. Summary statistics for the combined pulp and paper industry are given on pp. 280-281.

There are to-day three classes of mills in the industry. These, in 1937, numbered 27 mills making pulp only, 47 combined pulp and paper mills, and 24 mills making paper only.

The industry in Canada includes three forms of industrial activity, the operations in the woods with pulpwood as a product, the manufacture of pulp, and the manufacture of paper. These three stages cannot be treated as entirely distinct nor can they be separated from the different stages of the lumber industry. Some of the important pulp companies operate sawmills to utilize the larger timber on their limits to the best advantage, and many lumber manufacturers divert a proportion of their spruce and balsam logs to pulp-mills. So far as operations in the woods are concerned, it is often impossible to state whether the timber being cut will eventually be made into lumber or into pulpwood.

On account of legislation already referred to, pulpwood cut on Crown lands must, in every province, be manufactured into pulp in Canadian pulp-mills except under special permit. The pulpwood which is exported to the United States is, therefore, largely cut from private lands. Table **5** shows the annual production of this commodity from 1930 to 1937, together with the quantities used by Canadian pulp-mills and the quantities exported and imported.

In 1908 almost two-thirds of the pulpwood cut in Canada was exported in the raw or unmanufactured form, but by 1916 the proportion had declined to two-fifths. Since 1930 the proportion exported has been less than one-fifth.

5.—Production, Consumption, Exports, and Imports of Pulpwood, calendar years 1930-37.

NOTE.—Figures for earlier years will be found in the corresponding table of previous editions of the Year Book.

Year.	Apparent Total Production of Pulpwood in Canada.			Canadian Pulpwood Used in Canadian Pulp-Mills.		Canadian Pulpwood Exported Unmanufactured.[1]		Imported Pulpwood Used in Canada.	
	Quantity.	Total Value.	Average Value per Cord.	Quantity.	Per Cent of Total Production.	Quantity.	Per Cent of Total Production.	Quantity.	Per Cent of Total Production.
	cords.	$	$	cords.	p.c.	cords.	p.c.	cords.	p.c.
1930....	5,977,183	67,529,622	11·30	4,646,717	77·7	1,330,466	22·3	94,632	1·6
1931....	5,046,291	51,973,243	10·30	4,088,988	81·0	957,303	19·0	59,291	1·4
1932....	4,222,224	36,750,910	8·70	3,602,100	85·3	620,124	14·7	45,654	1·1
1933....	4,746,383	33,213,973	7·00	4,027,827	84·9	718,556	15·1	17,049	0·4
1934....	5,773,970	38,302,807	6·63	4,752,685	82·3	1,021,285	17·7	13,919	0·2
1935....	6,095,016	41,195,871	6·76	4,985,143	81·8	1,109,873	18·2	19,940	0·3
1936....	7,002,057	48,680,200	6·95	5,766,303	82·3	1,235,754	17·6	9,591	0·1
1937....	8,298,165	63,057,205	7·60	6,593,134	79·5	1,705,031	20·5	20,505	0·2

[1] Exports of pulpwood in the calendar year 1938 were 1,587,529 cords.

The manufacture of pulp is the second stage in this industry. This is carried on by mills producing pulp alone and also by paper manufacturers operating pulp-mills in conjunction with paper-mills to provide their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export.

The supply of rags for paper-making is distinctly limited and the material too expensive for the manufacture of cheap paper. Early paper-makers experimented with fibres from the stems, leaves, and other parts of numerous annual plants, but the small proportion of paper-making material recoverable from such sources led to experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable for the production of all but the best classes of paper.

The preliminary preparation of pulpwood is frequently carried on at the pulp-mill, but there are in Canada a number of "cutting-up" and "rossing" mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for exportation. Pulpwood is measured by the cord (4′ by 4′ by 8′ of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood.

There are, in Canada, four methods of preparing wood-pulp, one of which is mechanical and three chemical. Detailed descriptions of these processes were given in the 1931 Year Book, pp. 290-291.

Pulp Production.—Growth was steady up to 1920, when 1,960,102 tons of pulp were produced. There was a drop in production in 1921, but production in 1922 at 2,150,251 tons, more than overtook the previous year's drop. Following this, with the exception of 1924, each year up to 1929 showed consistent growth in the annual production, 1929 creating a record for the industry with a production of 4,021,229 tons. This was followed by annual decreases down to 1932 since when steady increases have been recorded resulting, in 1937, in a new record of 5,141,504 tons. Table 6 shows the total production of pulp in Canada from 1930 to 1937, inclusive, together with the production of groundwood pulp and the production of fibre by chemical processes.

6.—Pulp Production, Mechanical and Chemical, calendar years, 1930-37.

NOTE.—Figures for earlier years will be found in the corresponding table of previous editions of the Year Book.

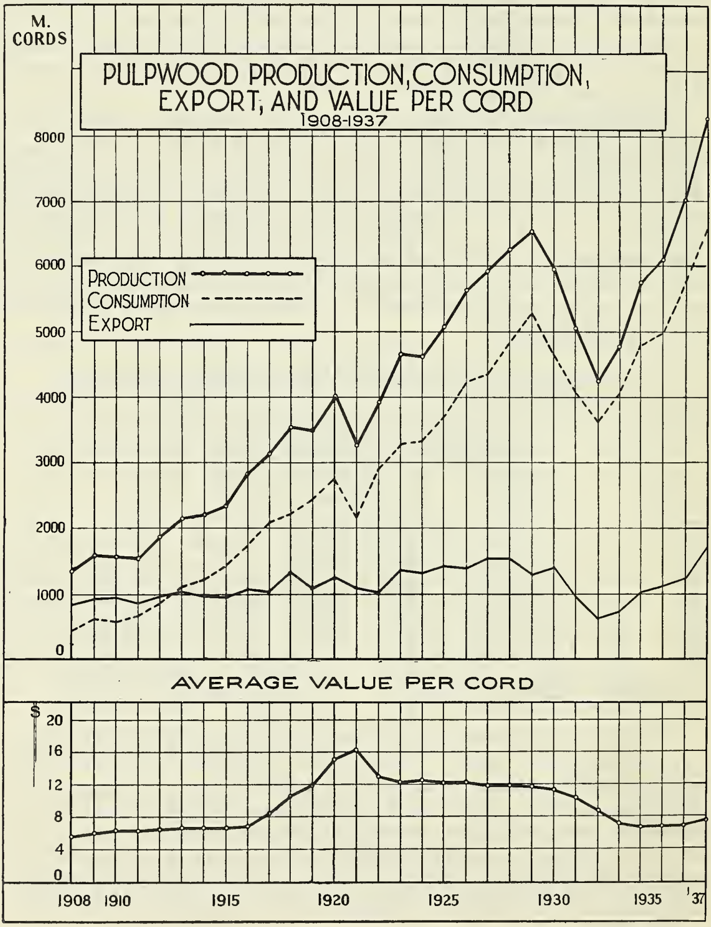
Year.	Total Production.[1]		Mechanical Pulp.[2]		Chemical Fibre.[2]	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1930	3,619,345	112,355,872	2,283,130	48,317,494	1,265,057	63,156,351
1931	3,167,960	84,780,809	2,016,480	37,096,768	1,151,480	46,998,988
1932	2,663,248	64,412,453	1,696,021	28,018,451	967,227	35,987,294
1933	2,979,562	64,114,074	1,859,049	25,332,444	1,120,513	38,781,630
1934	3,636,335	75,726,958	2,394,765	30,875,323	1,241,570	44,851,635
1935	3,868,341	79,722,039	2,563,711	32,323,820	1,283,743	46,444,144
1936	4,485,445	92,336,953	2,984,282	38,674,492	1,480,925	52,701,156
1937	5,141,504	116,729,228	3,384,744	46,663,759	1,756,760	70,065,469

[1] Some of these totals include unspecified pulp.

[2] Including screenings.

During 1937 there were 27 mills manufacturing pulp only and 47 combined pulp and paper mills. These 74 establishments turned out 5,141,504 tons of pulp, valued at $116,729,228, as compared with 4,485,445 tons of pulp, valued at $92,336,953 in 1936. Of the 1937 total for pulp, 4,063,088 tons, valued at $67,155,333, were made in the combined pulp and paper mills for their own use in manufacturing paper, Of the remainder, 183,185 tons, valued at $7,485,391, were made for sale in Canada, while 895,231 tons, valued at $42,088,504 were made for export. As in the case of pulpwood, a part of the product at this stage of the industry provides raw material for the later stages, while the remainder has a definite market value as pulp.

Over 64 p.c. of the production in 1937 was groundwood pulp and almost 18 p.c. unbleached sulphite fibre, these two being the principal components of newsprint paper. Bleached sulphite, bleached and unbleached sulphate, and soda fibre made up the remainder, with groundwood and chemical screenings, for which a considerable market has developed in recent years in connection with the manufacture of rigid insulating boards. Table 7 shows the production of pulp by provinces in the latest five years.



7.—Production of Wood-Pulp in Canada, by Chief Producing Provinces, 1933-37.

Note.—Figures for earlier years will be found in the corresponding table of previous editions of the Year Book.

Year.	Quebec.		Ontario.		Canada.[1]	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1933	1,360,704	29,860,706	867,417	18,644,259	2,979,562	64,114,074
1934	1,813,096	36,837,402	999,935	21,000,769	3,636,335	75,726,958
1935	1,916,382	38,235,076	1,087,742	22,866,369	3,868,341	79,722,039
1936	2,236,376	44,071,292	1,257,060	27,005,484	4,485,445	92,336,953
1937	2,551,546	55,277,014	1,466,555	33,964,784	5,141,504	116,729,228

[1] Includes production in British Columbia, Manitoba, New Brunswick, and Nova Scotia.

Pulp Exportation.—The following table gives the quantities of pulp exported by the principal pulp-producing countries of the world in 1937. Figures for 1913, the year immediately preceding the War, and for 1936 are shown for comparison. Figures of the exports of wood-pulp from Canada in the fiscal years ended Mar. 31, 1935-38, will be found in Table **12** of the chapter on External Trade. In the calendar year 1938 the exports of wood-pulp from Canada were 554,037 tons. The total exports of the ten principal pulp-exporting countries of the world in 1937 were 7,646,649 short tons, of which Canada contributed about 11 p.c.

8.—Exports of Wood-Pulp from Principal Wood-Pulp Producing Countries of the World, calendar years 1913, 1936, and 1937.

Country.	Totals, Wood-Pulp.			Proportions, 1937.	
	1913.	1936.	1937.	Chemical.	Mechanical.
	tons.	tons.	tons.	tons.	tons.
Sweden	1,112,313	2,847,885	3,232,161	2,517,757	714,404
Finland	132,674	1,497,123	1,620,295	1,299,983	320,312
Norway	779,025	971,615	1,072,278	411,265	661,013
Canada	**298,169**	**754,496**	**870,716**	**692,572**	**178,144**
United States	19,776	193,485	302,051	300,130	1,920
Austria	112,714	184,833	205,296	181,762	23,534
Germany	206,042	259,998	183,450	183,065	385
Czechoslovakia	23,935	120,933	149,787	149,688	99
Switzerland	7,328	3,456	7,881	6,018	1,863
Poland	Nil	4,060	2,735	2,735	-
Newfoundland	57,165	Nil	Nil	-	-
Totals	**2,749,141**	**6,837,884**	**7,646,649**	**5,744,975**	**1,901,674**

Paper Production.—The paper-making stage of the industry involves the consumption of wood-pulp and other paper stock in the manufacture of paper and other pulp products. Accurate annual statistics for this part of the industry are available only for 1917 to 1937. Figures for 1930-37 are given in Table **9**.

During 1937 there were 47 combined pulp and paper mills and 24 mills making paper only. These 71 establishments produced 4,345,361 tons of paper, with a total value of $175,885,423, as compared to 3,807,329 tons, valued at $147,854,652 in 1936. Newsprint paper now forms nearly 85 p.c. of the annual paper production in Canada. In 1937, the production was 3,673,886 tons, valued at $126,424,303, a record production for volume although its value was lower than that of 1929, the record year for value. The preliminary estimate for 1938 is 2,624,580 tons, also a decrease of 28·1 p.c. from 1937.

9.—Summary of Paper Production in Canada, calendar years 1930-37.

NOTE.—Figures for earlier years will be found in the corresponding table of previous editions of the Year Book.

Year.	Newsprint Paper.		Book and Writing Paper.		Wrapping Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1930	2,497,952	136,181,883	69,468	12,261,659	78,320	7,880,224
1931	2,227,052	111,419,637	59,580	10,154,171	77,194	7,479,993
1932	1,919,205	85,539,852	56,781	8,687,895	69,018	6,289,293
1933	2,021,965	66,959,501	60,683	8,927,408	67,780	6,441,695
1934	2,604,973	86,811,460	64,991	9,681,536	79,779	7,740,823
1935	2,765,444	91,762,201	70,350	10,440,789	82,517	7,956,783
1936	3,225,386	105,214,533	74,940	10,866,346	95,916[1]	8,761,356[1]
1937	3,673,886	126,424,303	84,168	12,620,507	108,734	10,237,823

Year.	Boards.		Tissue and Miscellaneous Paper.		Totals, Paper.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	tons.	$	tons.	$	tons.	$
1930	233,217	12,193,829	47,830	4,788,279	2,926,787	173,626,383[2]
1931	202,854	10,225,732	44,545	4,350,356	2,611,225	143,957,264[2]
1932	209,938	9,621,041	35,825	3,735,042	2,290,767	114,115,570[2]
1933	232,190	10,598,439	36,802	3,762,832	2,419,420	96,689,875
1934	280,724	13,351,475	39,049	3,306,931	3,069,516	120,892,225
1935	314,849	15,051,893	47,736	3,866,720	3,280,896	129,078,386
1936	363,778[1]	17,531,451[1]	47,309	4,058,248	3,807,329	147,854,652[2]
1937	422,710[1]	21,719,730	55,863	4,883,060	4,345,361	175,885,423

[1] Revised since the publication of the 1938 Year Book. [2] Includes some unspecified paper products.

Newsprint made up about 84·5 p.c. of the total paper production in 1937, with about 9·7 p.c. of paper boards, 2·5 p.c. of wrapping paper, 1·9 p.c. of book and writing paper, and about 1·3 p.c. of tissue and miscellaneous papers.

10.—Production of Paper in Canada, by Provinces, 1937.

Province.	Quantity.	Value.
	tons.	$
Quebec	2,232,075	87,502,033
Ontario	1,342,084	58,678,363
British Columbia	320,920	12,629,711
Nova Scotia, New Brunswick, and Manitoba	450,282	17,075,316
Totals	**4,345,361**	**175,885,423**

Quebec produced 51·3 p.c. of the total quantity, Ontario 30·9 p.c., British Columbia 7·4 p.c., and Nova Scotia and New Brunswick the remaining 10·4 p.c.

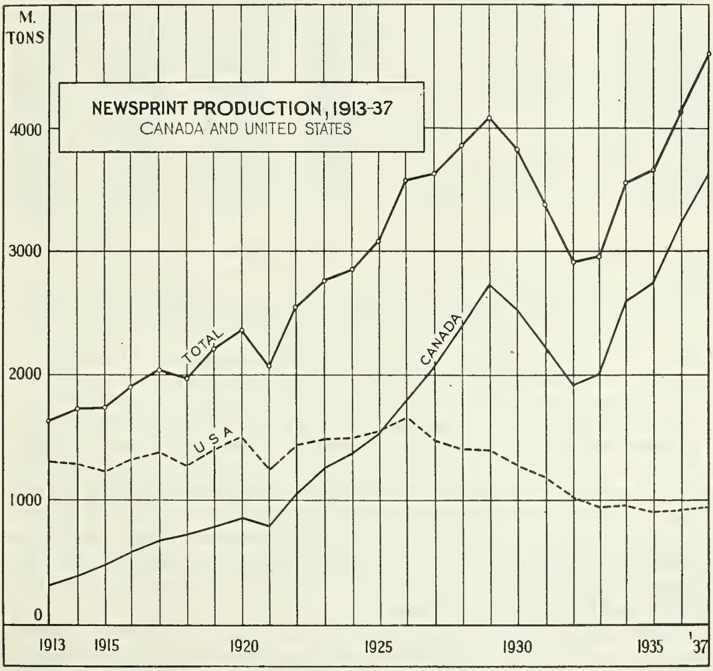
World Production of Newsprint.—The world production of newsprint in 1937 has been estimated at 8,971,000 short tons, of which North America supplied 55 p.c. and Canada alone over 41 p.c. The estimated production in the leading 24 countries, compared with 1936, and the ten-year averages 1928-37 were as follows:—

11.—Estimated Quantities of Newsprint Produced in Leading Countries, 1936 and 1937, and the Ten-Year Averages, 1928-37.

Note.—Countries in order of importance according to the 1937 production.

Country.	Production. 1936.	Production. 1937.	Ten-Year Average.
	'000 short tons.	'000 short tons.	'000 short tons.
Canada	**3,192**[1]	**3,645**[1]	2,595
Great Britain	1,004	1,033	818
United States	921	946	1,094
Germany	525	521	517
Finland	402	459	294
France	331	424	291
Japan	384	413	318
Newfoundland	328	353	295
Sweden	282	303	269
Norway	200	212	181
Russia	217	192	130
Netherlands	91	97	86
Italy	69	66	66
Austria	57	62	57
Belgium	53	57	49
Czechoslovakia	46	54	43
Switzerland	44	50	45
Poland	32	44	29
Spain	18	18	40
Latvia	7	8	5
Estonia	7	7	13
Hungary	[2]	4	–
Chile	7	2	2
Bulgaria	[2]	1	–
Mexico	Nil	Nil	13
Denmark	"	"	7
Totals	**8,217**	**8,971**	**7,257**

[1] A slight difference in classification accounts for the difference between these figures and those shown in Table 9. [2] Not available.



Exportation of Newsprint Paper.—In the fiscal year 1908, exports of printing paper were for the first time separately recorded, and valued at $2,833,535. In the fiscal year 1913, when quantities were first shown, Canada exported 146,792 short tons valued at $5,692,126. For the fiscal year ended Mar. 31, 1938, our exports of newsprint amounted to 3,190,790 tons valued at $120,007,550 and ranked second only to wheat among the exports of the Dominion. For exports of newsprint and other paper in the fiscal years ended Mar. 31, 1935-38, see Table **12** of the chapter on External Trade.

As early as 1913 Canada led the world in the exportation of newsprint, and since that date her exports have increased more than thirteen times in quantity. The following table shows the exportation of newsprint from the 12 principal exporting countries in 1913, 1935, 1936, and 1937. Canada contributed to the total over twice as much as the other 11 countries combined in 1937. Canada's exports of newsprint paper for the calendar year 1938 were 2,424,655 tons.

12.—Exports of Newsprint Paper from Principal Paper-Producing Countries of the World, 1913, 1935, 1936, and 1937.

NOTE.—Countries arranged in order of importance of exports, 1937.

Country.	Years ended December 31—			
	1913.	1935.	1936.	1937.
	short tons.	short tons.	short tons.	short tons.
Canada	**256,661**	**2,574,987**	**2,993,089**	**3,455,240**
Finland	77,213	309,066	377,032	421,503
Newfoundland	49,755	276,036	312,879	298,406
Sweden	67,938	228,422	198,503	222,851
Germany	75,761	129,107	183,921	217,951
Norway	108,507	164,196	170,556	195,403
United Kingdom	105,153	78,935	86,182	63,472
Austria	14,855	44,708	41,769	61,991
Japan	3,270	40,932	40,203	40,811
United States	43,301	22,523	14,573	17,044
Netherlands	-	11,002	10,093	11,928
Czechoslovakia	-	3,752	8,663	10,597
Totals	**802,414**	**3,883,666**	**4,437,463**	**5,017,197**

Statistics of the Combined Pulp and Paper Industries.*—The manufacture of pulp, the manufacture of paper and the manufacture of products made of paper may, under certain conditions, be treated as three industries as they are frequently carried on in separate plants by entirely independent companies. For some time, however, it has been the practice of many Canadian concerns to combine the manufacture of pulp and paper in one complete establishment. In more recent years there has been a further tendency to combine in one plant the manufacture of basic stock and the converting of this paper into towels, stationery, and other highly processed paper products. In some cases, what might otherwise be considered as three distinct industries, are carried on in one plant as three steps in the production of the finished paper article. This further converting of paper within the pulp and paper industry itself represents only a small part of Canada's production of converted paper and boards, the bulk of which is still made in special converting mills classified in other industrial groups.

The presence of these different combinations in one mill makes it difficult to separate many of the statistics relating to the manufacture of pulp, basic paper, and converted paper products. All converting operations carried on in paper mills in this industry are now attributed to the particular industrial group of converting plants to which they properly belong. The 1937 figures therefore exclude all information pertaining to paper converting which tends to lower perceptibly all the principal statistics of the pulp and paper industry and to render these figures not strictly comparable with those of previous years. Including manufacturing operations as far as the basic paper-making stage, there were altogether 98 mills in operation in 1937. The capital invested amounted to $570,352,287, the employees numbered 33,205 and their salaries and wages amounted to $48,757,795. If we disregard the pulp made for their own use in combined pulp and paper mills we can consider the total of materials and supplies used in the industry as a whole as amounting to $91,121,629 in 1937,* $72,202,983 in 1936 and $57,995,037 in 1935 and the gross value of production as $226,255,915 in 1937* as compared with $185,144,603 in 1936 and $162,651,282 in 1935. The net† value of production amounted to $106,013,221 in 1937,* $87,150,666 in 1936 and to $81,973,352 in 1935.

---

* See Chapter XIV—Manufactures—and Index for further particulars regarding the pulp and paper and paper-converting industry.

The pulp and paper industry, one of the leading single manufacturing industries in Canada, has been first in wages and salaries paid since 1922, when it first exceeded the sawmills. It was the leading industry in gross value of production from 1925, when it replaced the flour-mills, until 1935 when it was overtaken by non-ferrous smelting and refining. It has been second to central electric stations in net value of production and capital for some years. Only the manufacturing stages of the industry are considered in these comparisons, no allowance being made for capital invested, men employed, wages paid, or primary products sold in connection with the woods operations. These form an important part of the industry as a whole but cannot be separated from woods operations carried on in connection with sawmills and other industries. If the $12,088,329 worth of exported pulpwood be taken into consideration, the gross total contribution of the pulp and paper industry toward Canada's excess of exports over imports in 1937 amounted to $181,278,079, representing the difference between exports and imports of pulpwood, pulp, paper, and paper products.

The United States market absorbs annually all but a very small part of Canada's pulpwood exports, about 85 p.c. of her pulp and 77 p.c. of her paper shipments. About half of the paper consumed in the United States is either of Canadian manufacture or is made from wood or wood-pulp imported from Canada.

Subsection 3.—The Lumber Industry.

The manufacture of lumber, lath, shingles, and other products of the sawmill is the second most important industry in Canada depending on the forest for its raw materials. Annual statistics covering this and other forest industries were collected and published by the Forest Service of the former Department of the Interior from 1908 to 1916, since when the work has been carried on by the Dominion Bureau of Statistics, in co-operation with the Forest Service.

The production of sawn lumber in Canada in 1920 reached a total of over four billion feet board measure, the highest cut recorded since 1912. Production in 1921 decreased by over a third and the average value by over $10 a thousand feet. This was followed, with one exception, by annual increases up to 1929 and then by annual decreases down to 1932. There were increases in 1933, 1934, 1935, 1936, and 1937. British Columbia now produces 52 p.c. of the total. Table **13** gives the production of lumber, lath, and shingles in each year from 1927 to 1937.

---

* Owing to the adjustment in connection with combined paper-mills and paper-converting mills, the 1937 figures are not exactly comparable with those of previous years.

† This is the net value of production as calculated for years since 1934. It is obtained by deducting cost of power, fuel, and consumable supplies, as well as cost of materials, from gross value of production.

13.—Quantities and Values of Lumber, Shingles, and Lath Produced in Canada, calendar years 1927-37.

Note.—Figures for the years 1908-26, inclusive, will be found at p. 300 of the 1931 Year Book.

Year.	Lumber Cut.		Shingles Cut.		Lath Cut.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. b.m.	$	M	$	M	$
1927	4,098,081	97,508,786	2,837,281	8,716,085	1,322,665	5,603,396
1928	4,337,253	103,590,035	2,865,994	10,321,341	1,138,417	4,802,616
1929	4,741,941	113,349,886	2,707,235	9,423,363	835,799	3,860,799
1930	3,989,421	87,710,957	1,914,836	5,388,837	398,254	1,154,593
1931	2,497,553	45,977,843	1,453,277	3,331,229	228,050	576,080
1932	1,809,884	26,881,924	1,802,008	3,556,823	208,321	474,889
1933	1,957,989	27,708,908	1,939,519	4,448,876	151,653	332,364
1934	2,578,411	40,509,600	2,408,616	4,422,578	177,988	412,844
1935	2,973,169	47,911,256	3,258,253	7,593,765	226,854	536,087
1936	3,412,151	61,965,540	3,019,030	6,754,788	286,323	874,231
1937	4,005,601	82,776,822	3,048,395	7,631,691	392,922	1,231,965

The total number of sawmills, tie, shingle, lath, veneer, stave, heading and hoop mills, and mills for the cutting-up and barking or rossing of pulpwood reporting in 1937 was 3,836, as compared with 3,638 in 1936. The capital invested in these mills in 1937 was $90,405,105, employment amounted to 33,917 man-years and wages and salaries amounted to $27,173,872. The logs, bolts, and other materials and supplies of the industry were valued at $57,280,080 and the gross value of production was $104,849,785. The net production in 1937 was $46,727,302.

The production of sawn lumber increased in quantity from 1936 to 1937 by 17·4 p.c. Lath production increased by 37·2 p.c., and shingle production increased by 1·1 p.c. Quantity and value increases were reported in all products but sawn ties, plywood, staves, and spoolwood. The total gross value of production increased from $80,343,291 in 1936 to $104,849,785 in 1937.

14.—Quantities and Values of Lumber and All Sawmill Products Made in Canada, by Provinces, 1936 and 1937.

Province.	Lumber Production.				Total Values.[1]	
	Quantities.		Values.		1936.	1937.
	1936.	1937.	1936.	1937.		
	M ft. b.m.	M ft. b.m.	$	$	$	$
Prince Edward Island	5,347	6,312	88,904	118,405	118,138	152,818
Nova Scotia	118,402	178,160	1,704,920	2,833,055	2,049,412	3,238,037
New Brunswick	213,564	306,823	3,906,448	6,331,308	4,720,350	7,585,133
Quebec	467,670	700,530	8,859,771	14,661,735	11,871,123	18,800,636
Ontario	411,526	539,828	10,289,514	14,353,214	13,068,688	17,644,737
Manitoba	56,975	58,114	976,408	1,124,589	1,049,480	1,284,939
Saskatchewan	28,290	41,739	489,524	747,735	515,224	781,417
Alberta	86,669	101,420	1,216,215	1,478,214	1,404,446	1,714,467
British Columbia	2,023,708	2,072,675	34,433,836	41,128,567	45,546,430	53,647,601
Totals	**3,412,151**	**4,005,601**	**61,965,540**	**82,776,822**	**80,343,291**	**104,849,785**

---

[1] Includes all other sawmill products.

British Columbia came first in total production, contributing 51·7 p.c. of the total cut in lumber and 80 p.c. of the shingles in 1937. Quebec followed in second place, Ontario was third and New Brunswick fourth. Douglas fir is the most important kind of lumber sawn, and is produced almost entirely in British Columbia. Spruce is sawn in every province and comes second, with hemlock, white pine, cedar, and balsam fir next in order of importance. Cedar is the most important shingle-wood sawn. The conifers usually form about 95 p.c. of the total cut of all kinds of wood in this industry, only 5 p.c. being deciduous-leaved trees or hardwoods.

Lumber Exportation.—The square-timber trade reached its maximum development in the '60's; thereafter it declined gradually and has now almost entirely disappeared. Simultaneously with its decline came the increased exportation of deals and other sawn lumber, first to Great Britain and later to the United States. Our trade with the latter country has been from the first largely confined to planks, boards, and dimension stock. During the American Civil War our exports of forest products of all kinds to the United States for the first time exceeded those to Great Britain, but in late years this has become the rule. The total quantity of sawn lumber and square timber exported from Canada changed little from 1900 to 1929, averaging about two billion ft. b.m. per annum, but decreased considerably in the next three years reaching its lowest level in 1932. This was followed by substantial increases in 1933 and 1934, a decrease in 1935, increases in 1936 and 1937, and a decrease in 1938 to 1,753,091 M ft. b.m. Of the 1938 exports, 56 p.c. went to the United Kingdom and 13 p.c. to other Empire countries, making 69 p.c. to the Empire as a whole. Twenty-six p.c. went to the United States and 5 p.c. to other foreign countries, making 31 p.c. to all foreign countries. The exports of lumber, square timber, lath, and shingles all decreased in 1938.

15.—Canadian Exports of Planks, Boards, and Square Timber, by Countries, calendar years 1935-38.

Country.	1935.		1936.		1937.		1938.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	M ft. b.m.	$	M ft. b.m.	$	M ft. b.m.	$	M ft. b.m.	$
British—								
United Kingdom.	734,272	14,099,559	957,948	19,750,191	1,057,249	24,303,521	984,757	19,881,672
Ireland...........	4,965	88,485	4,139	79,625	8,844	189,818	7,052	144,877
New Zealand.....	3,867	96,576	6,364	176,720	5,871	186,227	7,506	202,100
Australia.........	135,544	1,781,639	117,069	1,542,487	164,296	2,897,141	141,790	2,189,171
British South Africa..........	18,816	350,751	42,282	853,171	27,516	723,456	26,334	541,176
BritishWestIndies	11,071	221,155	15,747	327,730	17,834	463,734	19,459	482,074
Other British countries.......	17,536	327,107	21,839	454,858	25,159	695,724	20,451	563,115
Totals, British....	**926,071**	**16,965,272**	**1,165,388**	**23,184,782**	**1,306,769**	**29,459,621**	**1,207,349**	**24,004,185**
Foreign—								
United States....	351,113	8,279,291	530,866	12,841,995	538,921	15,521,442	450,118	11,581,308
China............	74,649	941,704	88,968	1,155,008	39,256	674,941	39,170	591,200
Japan............	49,952	654,132	30,155	509,105	33,316	623,651	6,184	117,043
Other foreign countries.......	28,763	673,575	42,587	978,315	48,036	1,309,439	50,270	1,118,442
Totals, Foreign...	**504,477**	**10,548,702**	**692,576**	**15,484,423**	**659,529**	**18,129,473**	**545,742**	**13,407,993**
Grand Totals.....	**1,430,548**	**27,513,974**	**1,857,964**	**38,669,205**	**1,966,298**	**47,589,094**	**1,753,091**	**37,412,178**

Subsection 4.—Manufactures of Wood and Paper.

Sawmills and pulp-mills draw their raw material directly from the forest in the form of logs and pulpwood, and produce sawn lumber, other sawmill products, and pulp and paper. There are also a number of important industries which use these products as raw material for further manufacture. Some of them produce commodities made almost entirely of wood, wood-pulp or paper, others manufacture articles in which wood is the most important component, and others produce articles in which wood is necessary but forms only a small proportion of the value. There are, in addition, a number of industries which use wood indirectly in the manufacture of articles which do not contain wood as a component part. The first class includes the manufacture of paper, sash, doors, other millwork, and planing-mill products; boxes, baskets, cooperage, and other containers; canoes, boats, and small vessels; kitchen, bakers' and dairy woodenware; wooden pumps, piping, tanks, and silos; spools, handles, dowels, and turnery. The second class includes the manufacture of furniture, vehicles and vehicle supplies, coffins and caskets, etc., and the use of paper in printing and the manufacture of paper boxes, bags, stationery, and paper goods. The third class, where wood has a secondary importance, includes the manufacture of agricultural implements, railway rolling-stock, musical instruments, brooms and brushes, etc. The fourth class can be said to include practically every form of industrial activity, as few, if any, of these are entirely independent of the use of wood, directly or indirectly.

A classification based on the chief component material in the products of each manufacturing establishment is now largely used in compiling manufacturing statistics and for external trade purposes. Under this system most of the forest industries fall in the wood and paper group. In 1937, this group, comprising 8,497 establishments gave 147,254 man-years of employment and paid out $165,298,485 in salaries and wages. Capital invested in the industries of the group amounted to $927,070,757, the gross value of its products was $597,061,878 and the net value, $306,961,553.

The forests of Canada contribute substantially to her export trade values. During the fiscal year ended Mar. 31, 1938, exports of wood and paper products amounted to $253,434,860 and made up 23·7 p.c. of the total value of exports for the period, amounting to $1,070,228,609. Domestic exports of wood and paper products were exceeded by those of mineral products, which made up 36·6 p.c. of the total, and agricultural (vegetable and animal) products with 34·7 p.c. Wood and paper products are prominent among the individual items of export. Newsprint paper was first on the list in 1938, with planks and boards sixth and wood-pulp eighth. The gross contribution of wood and paper products toward a favourable trade balance for Canada amounted to $219,213,679 during the same period.

Subsection 5.—Forest Depletion and Increment.

Fire Losses.—No accurate summing up of forest fire losses in Canada's forests has ever been made, but it has been estimated that more than 60 p.c. of the original forest has been burned, about 14 p.c. has been cut for use and about 25 p.c. remains. Though the loss of merchantable timber has been greatly reduced in recent years by forest protective services and the education of the public, it still constitutes a serious drain on Canada's resources.

Since the historic Miramichi fire, which burned along the valley of the Miramichi river in New Brunswick in 1825, there have been a number of disastrous fires.

About the year 1845 vast areas west of lake Superior were burned over. Some years later a very extensive fire burned along the height of land from lake Timiskaming to Michipicoten. In 1871 a fierce fire swept over more than 2,000 square miles of forest from lake Nipissing westward along the north shore of Georgian bay. About the same time the greater part of the Saguenay and Lake St. John district, in Quebec, was swept by one of the most destructive fires on record. During a period of dry years from 1883 to 1893, a series of disastrous fires destroyed immense areas of timber in eastern and northern Manitoba and in northern Saskatchewan. Two other fires in 1891 and 1896 devastated more than 2,000 square miles of country in the southern Algoma district; in Quebec, country along the line of the Quebec and Lake St. John Railway also suffered by a number of disastrous forest fires about this time.

During more recent times a series of disastrous fires swept over northern Ontario. A number of isolated fires around the mining camp of Porcupine culminated, on July 11, 1911, in a conflagration which resulted in the loss of 72 lives and property damage estimated at $3,000,000. In 1916 fires in the same general region were responsible for the deaths of at least 224 people. In 1922 a third fire destroyed the town of Haileybury and other centres. In 1908 a fire originating in the forest around Fernie, B.C., destroyed that city. Every year thousands of acres are devastated by fires of less individual importance, which in the aggregate are rapidly depleting our forest resources. In 1923 there were unusually disastrous fires, chiefly in Eastern Canada. A total area of over 6,000,000 acres was burned over with a loss of approximately $46,000,000. The average area burned over for the ten-year period from 1928 to 1937 was slightly over 2,524,000 acres with an average annual loss of 325 million cubic feet of standing timber of merchantable size and over 1,000,000 acres of young growth and cut-over land. The cost of fire-fighting and the value of timber and other property destroyed averaged $4,878,000 annually.

Speaking generally, there are, annually, two periods in Canada when the forest fire hazard is highest—in the spring, after the disappearance of the snow, when the forest floor is dry and the green underbrush has not yet developed, and again in the fall when the herbaceous growth is dead and the ground covered with dry leaves.

Statistics compiled by the Dominion Forest Service from reports received from the various provincial and private forest protective organizations show that, during the ten-year period from 1928 to 1937, 85 p.c. of all fires reported were due to human agencies and were, therefore, preventable. The chief causes of forest fires in Canada, on a percentage basis are: camp fires, 20 p.c.; settlers, 16 p.c.; lightning, 15 p.c.; smokers, 14 p.c.; with railways and incendiary, 8 p.c. each.

Losses Through Insects and Fungi.—From 1912 to 1923 the spruce bud-worm caused tremendous damage to the spruce and balsam-fir forests in Eastern Canada. In Quebec it was estimated that 100,000,000 cords of pulpwood were destroyed by this insect, and in New Brunswick the loss was placed at 15,000,000 cords. In these regions the active state of the infestation is now practically over, but the insect is causing damage to jack pine in northern Ontario, Manitoba, and Saskatchewan. Other insects, though not as destructive as the spruce bud-worm, entail a heavy drain on the forest. The hemlock looper and a new species closely related to the spruce bud-worm cause considerable damage in eastern coniferous forests. The most serious forest insect infestation at present is that of the spruce saw-fly, which is causing extensive damage in Quebec and New Brunswick. During recent years dusting by aeroplane has been developed on a practical basis by the Division of Entomology of the Department of Agriculture and promises to be effective in the control of certain defoliating insects under certain conditions.

Perhaps the most effective means of controlling destructive forest insects is by the introduction of parasites. The Division of Entomology has developed this means of attack with marked success in the case of the larch saw-fly and has recently secured from Europe some millions of parasitic insects which are being liberated in the forests infested with the spruce saw-fly. The loss caused by blister rust, the various forms of rot and other fungous diseases, is probably not less than that caused by insects under normal conditions. The butt rot is especially prevalent in balsam fir, and the value of the hardwoods is also greatly decreased by rot.

Summary of Losses and Increment.—During the ten years 1927 to 1936, the average annual consumption of standing timber for use amounted to about 2,567,000,000 cubic feet. During this period, fire has destroyed annually about 304,000,000 cubic feet of merchantable timber and young growth of various ages estimated to be equivalent to 264,000,000 cubic feet. The destruction occasioned by insects, fungi, and windfall is not known, but is estimated at 700,000,000 cubic feet per annum. It may be safely estimated that the forests of Canada are being depleted at the rate of about 3,835,000,000 cubic feet per annum. With about 600,000 square miles of accessible timber in a growing condition, an average annual increment of 10 cubic feet per acre would be quite possible under forest management and would cover this depletion. In view of the destruction of young growth which occurs and the deterioration of the forests and the soil, caused by repeated fires, there is little hope that this increment is being produced in merchantable timber at the present time throughout Canada, although particular areas are producing greatly in excess of this quantity. Nevertheless, extensive reproduction and rate-of-growth surveys conducted by the Dominion Forest Service indicate that the increment is greater than previously estimated.

CHAPTER X.—FUR RESOURCES AND FUR PRODUCTION.

This chapter is divided into three sections dealing, respectively, with: the fur trade, using that term in the sense which historical association has given it in Canada; fur farming, which follows closely the treatment formerly given the subject in the chapter on agriculture; and fur production and trade statistics, covering the total production and external trade in raw furs.

Section 1.—The Fur Trade.

Historical Sketch.—The place which the fur trade held during the French *régime* in Canada, when for a century and a half it was at once the mainspring of discovery and development and the curse of settled industry, is familiar history. Later, the Hudson's Bay Company may be said with truth to have held the West until the Dominion had grown to absorb it, bequeathing, to the civilization which followed, a native race accustomed to the white man and an example of organization and discipline that was of lasting value. The salient facts in the story are given in the Canada Year Book, 1934-35, pp. 343-344.

Fur Resources.—In the early years of the 19th century, the exports of furs from Canada exceeded in value those of any other product. Conditions have greatly changed, but the total output has not seriously declined and Canada may still be regarded as possessing, in her northern regions, one of the great fur preserves of the world. The rapid development of the country and the opening up of the West during the later 19th and earlier 20th centuries, together with improvements in transportation and settlement, meant the exhaustion of the fur resources of the settled parts. The trade, therefore, gradually retreated to less accessible territory. More recently the development of mining on a large scale over the Precambrian Shield has forced the trapper still farther north. Decline in fur resources has, however, been accompanied by increase in demand and higher prices, the encouragement of fur farming, and the introduction of conservation measures. Nevertheless, the belt of northern Canada, which includes the whole of the Northwest Territories, the northern parts of the Prairie Provinces, and extends through northern Ontario and Quebec and into the Maritimes, remains one of the few natural reservoirs for fine furs and the fur resource of this vast area constitutes one of its major assets to-day; in fact, minerals and furs will probably remain the chief resources since much of the area is unsuited to settlement or forest growth.

The fur bearers of Canada are mostly carnivorous animals, but two very valuable rodents are included, *viz.*, beaver and muskrat. The largest fur-bearing animal is the bear—polar, along the Arctic coast and Hudson bay; grizzly, in the Rocky mountains; and black, common in wooded areas generally. Wolves are common and wide-spread—grey, black, and blue are colour varieties of the same species. Fox pelts account for more than half of the fur trade. Fur farms now supply nearly all of the silver fox pelts, while the Arctic regions provide a great number of white skins and a few blue ones. The ermine, or weasel, is fairly plentiful throughout the Dominion and is found as far north as trappers are operating. Otter, beaver, marten, fisher, and mink are furs of exceptional quality and beauty and are secured throughout the whole of the timbered parts of the northern belt. The mink is now being raised extensively on fur farms and the pelt of the ranch-bred mink is regarded as superior to that of the mink taken in the wilds.

Among the rodents, the beaver has the most valuable fur, but this animal has begun to show signs of decreasing and restrictions on the taking of beaver have been made more rigid in consequence. Muskrat is now quite highly prized and, so far as number of pelts taken is concerned, is far in advance of any other species; under the trade name of "Hudson seal", its pelt has become a favourite moderate-priced fur.

Conservation.*—The conservation of the fur bearers of Canada is a matter coming under the jurisdiction of the respective Provincial and Territorial Governments. Nevertheless, the Dominion, as a whole, is concerned in the conservation of fur and of all wild-life resources. It was to co-ordinate the wild-life conservation efforts of the various Dominion Departments that the Advisory Board on Wild Life Protection was organized in 1916. The Board is specially authorized to advise with respect to the administration of the Migratory Birds Convention Act and the Northwest Game Act, but has dealt with many other problems of wild-life conservation. Through conferences of provincial and Dominion officials which were convened for many years by the former Department of the Interior, but are now arranged by the Department of Mines and Resources, uniform and concerted action has been taken and the conservation of Canada's wild-life resources has been advanced. The general policy followed with regard to the fur-bearing animals has been mainly along two lines: first, to so regulate the taking of animals by limitation of catch or close season as to prevent their extinction in districts where natural conditions provide a suitable habitat; and second, to provide sanctuaries in strategic places which serve as reservoirs from which large areas of surrounding wild country may be naturally restocked.

Many of our most valuable fur-bearing animals are subject to marked fluctuations in numbers. The periods of abundance and of scarcity recur in sufficient regularity to be called cycles and they have an important bearing upon the fur trade generally and more particularly upon the well-being of a large percentage of our Indian and Eskimo population who depend upon the wild life for their livelihood. The Department of Mines and Resources, with the assistance of the Bureau of Animal Population, Oxford University, and the Hudson's Bay Company, has commenced an inquiry in the form of an annual questionnaire distributed to a number of Arctic stations with the object of endeavouring to determine the facts about each of these recurring fluctuations. It is necessary to continue this investigation from year to year because the situation is changing continuously, and it is hoped that the work will produce data from which a forecast can be made relating to the expected abundance of each important species. The study might also be suggestive of measures to prevent unnecessary depletion of any species of wild life during the periods of scarcity.

Information on the wild-life conservation activities of the provinces and territories may be secured from the chief game officials listed below: Roy A. Gibson, Deputy Commissioner, Northwest Territories, Ottawa (administers Northwest Game Act); G. A. Jeckell, Controller, Controller's Office, Dawson, Yukon; F. R. Butler, Commissioner, 411 Dunsmuir St., Vancouver, British Columbia; W. H. Wallace, Fish and Game Commissioner, Department of Agriculture, Edmonton, Alberta; Edward S. Forsyth, Game Commissioner, Department of Natural Resources, Regina, Saskatchewan; A. G. Cunningham, Director, Game and Fisheries Branch, Department of Mines and Natural Resources, Winnipeg, Manitoba; D. J. Taylor,

---

* Prepared under the direction of F. H. H. Williamson, Controller, National Parks Bureau, Department of Mines and Resources, Ottawa, by Hoyes Lloyd, Superintendent of Wild Life Protection.

Deputy Minister of Game and Fisheries, Toronto, 2, Ontario; L. A. Richard, Deputy Minister of Mines and Fisheries, Quebec, Quebec; Lt.-Col. H. H. Ritchie, Chief Game Warden, Department of Lands and Mines, Fredericton, New Brunswick; F. A. Harrison, Director, Department of Lands and Forests, Halifax, Nova Scotia; W. R. Shaw, Deputy Minister and Live Stock Superintendent, Department of Agriculture, Charlottetown, Prince Edward Island.

Section 2.—Fur Farming.*

Fur farming is now recognized as an industry upon which the fur trade is becoming more and more dependent for its supplies of raw furs. In 1921 the value of pelts of ranch-bred animals accounted for only 3 p.c. of the total value of raw fur production, while in 1937 it had risen to approximately 40 p.c.

Origin of the Fur-Farming Industry.—A short account of the origin of the fur-farming industry in Canada was given on p. 249 of the 1929 edition of the Year Book, while a more detailed account of the earlier history of the industry was given in a publication of the Commission of Conservation, Ottawa, entitled "Fur Farming in Canada", by J. Walter Jones, B.A., B.S.A., the second edition of which was published in 1914.

Fur Farms of Canada.—The term "fur farm" includes farms devoted entirely to the raising of fur-bearing animals (principally silver foxes), together with parts of farms where the raising of fur-bearing animals is carried on as a branch of the operations. Although the silver fox is of chief importance, other kinds of fur-bearing wild animals are being raised successfully in captivity—mink, raccoon, skunk, marten, fisher, and fitch. The mink in particular thrives in captivity if it receives proper care, and the number of mink farms is accordingly increasing at a rapid rate. In 1936 the value of the silver foxes on the farms represented 85 p.c. of the total amount, and the value of the mink, 13 p.c., leaving 2 p.c. for all other kinds combined. In addition to the farms already mentioned, where animals are raised in rather confined quarters, many areas of marsh, stream, or lake are being operated as muskrat and beaver farms. In the case of these semi-aquatic animals, however, although the animals are usually kept within a carefully fenced area where they are given supplementary food and are protected from predatory enemies, they nevertheless live and breed under natural conditions.

For many years the fox-farming industry was expanding so rapidly, both in Canada and abroad, that the chief source of income of ranches was the sale of live animals for breeding purposes, while the production of pelts was a minor or incidental feature. Thus, in 1925, the value of live silver foxes sold was $2,755,000, while that of silver fox pelts was only $736,000. As the number of foxes on fur farms progressively increased, ranchers had to readjust their economy to declining values for both live animals and pelts. The industry appears to be gradually becoming stabilized on a pelt basis rather than on a live animal basis. In the latest year, 1936, the value of live silver foxes sold was only $542,888, while that of silver fox pelts sold was $4,950,290, and for all fur farms the sales of pelts represented 87 p.c. of the total revenue. Mink is forging ahead in importance both as to values of animals and pelts sold. For the latest two years shown the increases have been about 7 p.c. and 270 p.c., and 122 p.c. and 102 p.c., for animals and for pelts, respectively, whereas over the same period the value of silver fox animals sold from farms has diminished appreciably and that of silver fox pelts has increased by only about 20 p.c. and 12 p.c.

---

* Revised by Miss F. A. Brown, Chief of the Fisheries and Animal Products Branch, Dominion Bureau of Statistics. This Branch publishes detailed annual reports on fur farms and on the production of raw furs.

Statistics of Fur Farms.—The earliest Dominion-wide statistics of fur farms were collected for the year 1919. The statistics of 1919 recorded 429 fur farms with 8,326 fur-bearing animals.

Preliminary Statistics for 1937.—According to figures published at the time of going to press, fur farms numbered 9,179, lands and buildings were valued at $7,687,171, and fur-bearing animals at $9,676,431. Animals sold alive numbered 25,202, valued at $1,030,888, while the 259,870 pelts sold were valued at $5,779,498.

1.—Numbers of Fur Farms, Values of Land and Buildings, and Values of Fur-Bearing Animals, by Provinces, 1934-36.

Province.	Fur Farms.			Values of Land and Buildings.			Values of Fur-Bearing Animals.		
	1934.	1935.	1936.	1934.	1935.	1936.	1934.	1935.	1936.
	No.	No.	No.	$	$	$	$	$	$
P.E. Island	646	771	730	879,083	884,895	876,446	1,168,683	1,192,410	1,088,647
Nova Scotia	690	853	958	254,739	314,687	337,422	431,098	557,447	608,202
New Brunswick	991	983	1,028	563,009	508,221	531,955	941,746	949,101	908,215
Quebec	2,279	2,408	2,570[1]	1,035,942	1,173,107	1,226,657	1,627,874	1,910,659	1,910,811[1]
Ontario	1,026	1,029	1,170	1,215,022	1,321,913	1,401,675	1,606,592	1,848,343	2,044,500
Manitoba	352	400	512[1]	592,400	700,403	797,602[1]	760,546	913,072	1,109,299[1]
Saskatchewan	225	308	349	404,707	413,752	567,550	490,828	545,552	629,432[1]
Alberta	510	463	514	852,449	905,913	972,632	1,077,110	1,085,050	1,164,714[1]
British Columbia	293	272	304	397,887	356,184	367,747	314,725	373,916	362,635[1]
Yukon	7	8	7	14,550	11,750	17,350	8,365	6,275	11,825
Totals	**7,019**	**7,495**	**8,142**[1]	**6,209,788**	**6,590,825**	**7,097,036**[1]	**8,427,567**	**9,381,825**	**9,838,280**[1]

[1] Revised since the publication of the 1938 Year Book.

Table 2 indicates that the numbers of silver foxes and mink, the two fur-bearing animals which have proved most readily adaptable to domestication, were higher in 1936 than in any previous year. The values of animals on fur farms, on the other hand, have been greatly affected by the decline in prices since 1929.

2.—Numbers of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
Silver fox	72,631	97,190	105,894	95,734	92,703	103,842	125,577	141,509	151,696
Patch or cross fox	1,853	2,563	3,335	3,369	2,978	2,574	2,472	1,931	1,723
Red fox	1,489	2,348	3,018	2,879	2,526	2,244	2,031	1,548	1,248
Blue fox	1,331	1,576	1,755	1,219	858	689	691	669	649
Silver-blue fox	6	Nil	Nil	12	5	2	Nil	Nil	Nil
White fox	1	4	64	65	39	11	5	"	4
Mink	5,028	10,436	20,726	21,062	17,212	18,640	25,435	31,946	44,695[1]
Raccoon	1,852	2,870	3,395	3,600	3,057	2,522	1,867	1,334	930
Skunk	99	78	20	54	20	12	19	Nil	2
Marten	152	187	228	272	207	202	154	113	122
Fisher	136	184	195	244	200	183	164	163	126
Opossum	Nil	Nil	3	Nil	Nil	Nil	Nil	Nil	Nil
Coyote	30	73	135	72	44	34	22	18	27
Badger	113	726	559	307	119	63	45	22	27
Lynx	9	10	13	16	10	1	Nil	Nil	Nil
Otter	1	2	Nil	Nil	Nil	Nil	"	"	"
Fitch	Nil	25	150	826	1,587	1,857	1,558	1,144	1,001
Ferret	"	5	1	Nil	3	4	1	6	Nil
Weasel	"	11	6	11	17	8	9	8	8
Nutria	"	Nil	10	27	56	64	46	72	62
Chinchilla rabbit	3,464	1,438	1,206	239	80	79	79	2	[2]
Rabbit, *n.e.s*	1,733	428	475	207	285	291	118	57	[2]
Karakul sheep	94	96	193	140	108	107	111	102	102
Muskrat[3]	168,861	711,111	425,525	119,285	132,973	65,324	35,556	20,539	17,769
Beaver[3]	799	698	1,112	806	1,118	1,029	1,010	1,180	888
Totals	**259,682**	**832,059**	**568,018**	**250,446**	**256,205**	**199,782**	**196,970**	**202,363**	**221,079**[1]

[1] Revised since the publication of the 1938 Year Book. [2] The publication of information concerning rabbits on farms has been discontinued. [3] Based on estimates furnished by the operators of the farms.

3.—Values of Fur-Bearing Animals on Fur Farms in Canada at Dec. 31, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	$	$	$	$	$	$	$	$	$
Silver fox.....	14,922,378	18,047,124	13,386,171	7,259,148	6,027,501	6,849,725	7,742,294	8,495,851	8,345,552
Patch or cross fox....	167,222	233,220	270,257	150,597	112,548	99,570	81,292	65,684	61,784
Red fox......	46,770	91,575	77,872	45,988	33,199	27,405	23,583	16,149	13,567
Blue fox......	172,682	196,750	174,193	73,237	34,375	25,243	22.865	20,750	21,043
Silver-blue fox	1,520	Nil	Nil	650	200	100	Nil	Nil	Nil
White fox.....	150	400	1,700	2,410	1,310	920	800	"	120
Mink.........	328,998	765,333	1,286,737	642,045	328,534	349,411	451,499	695,492	1,314,133[1]
Raccoon......	59,672	80,801	72,242	48,640	32,033	22,996	15,844	10.658	7,889
Skunk........	693	341	73	187	126	12	14	Nil	10
Marten.......	14,310	17,340	20,660	17,550	10,739	10,697	8,125	6,460	7,225
Fisher........	24,325	28,585	29.810	29,170	16,995	17,190	14,745	16,425	13,885
Opossum.....	Nil	Nil	25	Nil	Nil	Nil	Nil	Nil	Nil
Coyote.......	480	850	1,592	836	302	356	138	132	280
Badger.......	4,445	23,350	18,812	7,125	2,601	1,357	1,040	434	810
Lynx.........	880	825	1,600	660	320	20	Nil	Nil	Nil
Otter.........	70	100	Nil	Nil	Nil	Nil	"	"	"
Fitch.........	Nil	550	5,760	13,478	16,496	11,729	6,604	4,598	3,472
Ferret........	"	25	5	Nil	15	12	2	30	Nil
Weasel.......	"	50	25	28	29	8	10	4	8
Nutria.......	"	Nil	700	1,880	2,245	2,460	945	1,065	1,320
Chinchilla rabbit......	27,711	8,627	2,089	342	194	65	36	5	[2]
Rabbit, *n.e.s.*	12,575	2,428	1,623	685	1,454	484	234	109	[2]
Karakul sheep	5,348	4,300	5,334	1,650	1,255	1,060	917	540	560
Muskrat[3].....	562,749	1,725,391	755,800	152,889	93,473	56,088	31,625	20,852	23,194
Beaver[3]......	48,475	75,070	84,667	48,042	38,818	32,659	24,955	26,587	23,428
Totals......	**16,401,453**	**21,303,035**	**16,197,747**	**8,497,237**	**6,754,762**	**7,509,567**	**8,427,567**	**9,381,825**	**9,838,280**[1]

[1] Revised since the publication of the 1938 Year Book. [2] The publication of information concerning rabbits on farms has been discontinued. [3] Based on estimates furnished by the operators of the farms.

The annual revenue of the fur farmer arises from two sources, the sale of animals and the sale of pelts. Table **4** shows the sales of animals by kinds in the years 1928 to 1936 and Table **5** the sales of pelts. During late years the sales of pelts have exceeded the sales of live animals, while in former years the reverse was the case.

4.—Values of Fur-Bearing Animals Sold from Fur Farms in Canada, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	$	$	$	$	$	$	$	$	$
Silver fox..............	3,552,874	3,856,158	1,405,202	358,394	193,043	301,612	488,847	562,480	542,888
Patch or cross fox......	38,675	66,554	29,296	8,526	4,467	5,313	3,291	3,280	3,321
Red fox..............	12,159	22,178	10,900	5,788	2,657	2,744	2,729	2,110	1,293
Blue fox..............	28,530	45,035	24,895	8,270	1,355	502	825	335	1,110
Silver-blue fox.........	550	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
White fox.............	Nil	"	161	"	210	"	"	"	25
Mink..................	140,889	407,570	301,754	85,728	28,581	34,802	68,708	73,402	272,560[1]
Raccoon...............	18,031	17,996	13,800	4,825	2,163	2,201	1,294	779	867
Skunk.................	Nil	80	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Marten................	350	1,270	2,075	905	570	100	155	800	292
Fisher.................	2,375	4,825	4,399	7,495	2,090	1,200	1,825	3,255	5,930
Coyote................	Nil	20	20	124	Nil	Nil	230	Nil	Nil
Badger................	215	4,984	2,957	485	145	6	Nil	320	"
Lynx..................	Nil	Nil	Nil	Nil	20	Nil	"	Nil	"
Fitch..................	"	100	1,720	6,724	5,565	4,025	2,436	2,377	1,160
Ferret.................	"	75	Nil	Nil	Nil	Nil	6	Nil	Nil
Nutria.................	"	Nil	"	175	515	675	1,040	115	880
Chinchilla rabbit......	18,355	2,469	170	58	438	Nil	Nil	Nil	[2]
Rabbit, *n.e.s*..........	7,861	1,071	677	172	642	439	120	4	[2]
Karakul sheep.........	150	200	1,500	70	275	300	212	160	Nil
Muskrat...............	16,206	44,308	28,394	3,881	457	83	8	15	446[1]
Beaver................	200	60	625	380	Nil	460	1,325	Nil	Nil
Totals............	**3,837,420**	**4,474,953**	**1,828,545**	**492,000**	**243,193**	**354,462**	**573,051**	**649,432**	**830,772**[1]

[1] Revised since the publication of the 1938 Year Book. [2] The publication of information concerning rabbits on farms has been discontinued.

5.—Values of Pelts Sold from Fur Farms in Canada, 1928-36.

Kind of Animal.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.
	$	$	$	$	$	$	$	$	$
Silver fox........	2,278,611	2,195,253	2,921,885	2,835,470	2,821,593	3,441,020	3,690,431	4.437,301	4,950,290
Patch or cross fox	54,307	43,122	75,676	84,993	93,018	95,522	84,503	75,273	65,182
Red fox..........	21,774	18,585	21,549	20,445	21,924	23,652	17,788	14,301	12,734
Blue fox.........	13,516	19,144	25,318	12,758	9,032	9,325	12,250	9.179	11,071
White fox........	Nil	Nil	25	792	135	65	50	75	80
Mink............	8,916	12,471	34,538	99,033	87,604	127,241	145,680	323,263	652,940[1]
Raccoon.........	1,502	3,027	2,618	4,445	5,096	4,738	5,248	4,410	3,519
Skunk...........	23	48	11	4	10	Nil	Nil	6	Nil
Marten..........	30	Nil	100	79	313	262	175	194	830
Fisher...........	112	320	405	145	1,120	1,576	963	626	1,512
Coyote..........	Nil	340	691	718	395	610	530	322	1,187
Badger..........	28	1,646	3,925	3,101	1,398	629	408	296	108
Lynx............	45	Nil	100	Nil	Nil	66	Nil	Nil	Nil
Fitch............	Nil	"	Nil	341	568	2,616	3,184	2,010	1,738
Weasel..........	"	"	7	Nil	34	30	23	25	20
Nutria..........	"	"	Nil	"	Nil	Nil	Nil	50	3
Chinchilla rabbit	526	806	45	65	8	"	"	Nil	[2]
Rabbit, *n e.s*....	246	263	22	Nil	Nil	29	"	"	[2]
Karakul sheep...	Nil	Nil	Nil	"	246	139	638	338	538
Muskrat	9,365	9,335	9,205	8.945	3,723	4,710	4,034	3,213	6,438
Beaver..........	25	550	150	126	410	213	105	113	248
Totals......	**2,389,026**	**2,304,910**	**3,096,270**	**3,071,460**	**3,046,627**	**3,712,443**	**3,966,010**	**4,870,995**	**5,708,438**[1]

[1] Revised since the publication of the 1938 Year Book. [2] The publication of information concerning rabbits on farms has been discontinued.

Section 3.—Statistics of Total Production and Trade in Furs.

Fur Production Statistics.*—Early records of raw fur production are confined to the decennial censuses, when account was taken of the number and value of pelts obtained by trappers. In 1920 the Dominion Bureau of Statistics commenced an annual survey of raw fur production, basing its statistics on information supplied by the licensed fur traders. This survey was continued for some years. More recently, annual statements, based on royalties, export tax, etc., have been made available by the provincial game departments (excepting Prince Edward Island), and these statements are now used in the preparation of the statistics issued annually by the Bureau. In the case of Prince Edward Island, the sales of pelts shown on the annual returns of fur farms had, prior to the season 1935-36, been used to prepare statistics of fur production for the province. In the season 1935-36, the Prince Edward Island Department of Agriculture was able to supply a statement of the total fur production, while for the season 1936-37 the statistics are based on returns supplied directly to the Bureau by the fur traders who deal in furs produced in the province.

The value of the raw fur production of Canada in the twelve months ended June 30, 1937, was $17,526,365, compared with $15,464,883 in the preceding season and $12,843,341 in the season 1934-35. These totals comprise the value of pelts of fur-bearing animals taken by trappers and of pelts sold from fur farms, the value of the latter representing 40 p.c. of the whole in 1936-37.

---

* Revised by Miss F. A. Brown, Chief of the Fisheries and Animal Products Branch, Dominion Bureau of Statistics.

6.—Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada with Percentages Sold from Fur Farms, years ended June 30, 1920-37.

Year ended June 30—	Pelts.	Value of Pelts.	Percentage Sold from Fur Farms.	Year ended June 30—	Pelts.	Value of Pelts.	Percentage Sold from Fur Farms.
	No.	$			No.	$	
1920	3,600,004	21,387,005[1]	1	1929	5,150.328	18,745,473	13
1921	2,936,407	10,151,594	3	1930	3,798,444	12,158,376	19
1922	4,366,790	17,438,867	4	1931	4,060,356	11,803,217	26
1923	4,963,996	16,761,567	4	1932	4,449,289	10.189,481	30
1924	4,207,593	15,643,817	6	1933	4,503,558	10,305,154	30
1925	3,820,326	15,441,564	4	1934	6,076,197	12,349,328	30
1926	3,686,148	15,072,244	5	1935	4,926,413	12,843,341	31
1927	4,289,233	18,864,126	6	1936	4,596,713	15,464,883	40
1928	3,601,153	18,758,177	11	1937	6,237,640	17,526,365	40

[1] Fur prices in this year were abnormally nigh. Any comparison of this figure with those of later years should take this into account.

The leading provinces with respect to value of raw fur production are Ontario, Quebec, Prince Edward Island, and Alberta, in the order named. The relation which the value for each province bore to the total for Canada in the year ended June 30, 1937 was: Ontario, 17·0 p.c.; Quebec, 14·4 p.c.; Prince Edward Island, 12·5 p.c.; Alberta, 12·3 p.c.; Manitoba, 9·3 p.c.; British Columbia, 8·0 p.c.; Saskatchewan, 7·6 p.c.; Northwest Territories, 6·7 p.c.; Nova Scotia, 5·2 p.c.; New Brunswick, 5·0 p.c.; and the Yukon Territory, 2·0 p.c.

Details by provinces of the numbers of pelts produced in the two latest years are given in Table 7.

7.—Numbers and Values of Pelts of Fur-Bearing Animals Produced in Canada, by Provinces, years ended June 30, 1936 and 1937.

Province or Territory.	Numbers of Pelts.		Values of Pelts.	
	1935-36.	1936-37.	1935-36.	1936-37.
			$	$
Prince Edward Island	64,581	75,178	2,119,706	2,182,723
Nova Scotia	78,200	122,562	676,379	910,877
New Brunswick	53,802	63,694	740,789	870,402
Quebec	295,606	286,278	2,470,998	2,516,012
Ontario	599.710	683,941	2,649,647	2,987,713
Manitoba	379,191	546,430	1,291,854	1,632,660
Saskatchewan	1,401,809	1,839,203	1,152,373	1,327,116
Alberta	1,274,919	2,068,118	1,696,383	2,161,507
British Columbia	194,576	215,966	1,201,523	1,411,668
Northwest Territories	211,551	285,962	1,188,285	1,178,129
Yukon	42,768	50,308	276,946	347,558
Canada	**4,596,713**	**6,237,640**	**15,464,883**	**17,526,365**

The principal item in Canada's raw fur production is silver fox, with a total value in 1936-37 of $6,777,644, or 39 p.c. of the total for all kinds of furs. The fox farms produce practically the entire supply of silver fox pelts, and the number recorded for the season 1936-37 (230,030) was the highest in the history of the industry. The total value also established a high record, but the average price per pelt ($29·46) was lower than in any previous season. Following silver fox, in order of total value, was mink, with $2,267,835. The mink is now being raised extensively on fur farms, and perhaps a third of the number of pelts shown in the fur production report may be credited to the farms. The number of mink pelts recorded for the season 1936-37 was 139,673, a decrease from the preceding season of 14,606. The value, on the other hand, showed an increase of $566,258, the increase being due to the higher average price—$16·24 per pelt compared with $11·03 in the season 1935-36. Among other important furs were muskrat ($2,250,971); ermine ($818,290); red fox ($716,747); beaver ($699,011); marten ($642,204); lynx ($605,526); and cross fox ($518,066). Each of these kinds recorded an increase over the preceding season in the average price per pelt.

The total number of pelts of all kinds produced during the season 1936-37 was 6,237,640, compared with 4,596,713 in the season 1935-36. The large increase in total number is attributed chiefly to the greater number of squirrel pelts—2,147,114 compared with 629,580 in the preceding season.

The following table gives details of raw fur production by kinds for 1936 and 1937.

8.—Numbers, Total Values, and Average Values of Pelts of Fur-Bearing Animals Taken in Canada, years ended June 30, 1936 and 1937.

Kind.	Numbers of Pelts.		Total Values of Pelts.		Average Values per Pelt.	
	1935-36.	1936-37.	1935-36.	1936-37.	1935-36.	1936-37.
			$	$	$	$
Badger	157	141	2,001	1,688	12·75	11·97
Bear, black and brown	1,025	1,885	1,716	3,820	1·67	2·03
Bear, grizzly	9	2	63	14	7·00	7·00
Bear, white	59	49	843	641	14·29	13·08
Beaver	44,600	55,759	451,070	699,011	10·11	12·54
Coyote or prairie wolf [1]	50,639	48,704	365,560	458,489	7·22	9·41
Ermine (weasel)	661,573	926,611	403,300	818,290	0·61	0·88
Fisher or pekan	4,624	5,237	236,287	276,028	51·10	52·71
Fitch	2,417	1,437	3,232	2,331	1·34	1·62
Fox, cross	28,077	20,934	674,919	518,066	24·04	24·75
Fox, red	106,012	87,846	791,448	716,747	7·47	8·16
Fox, silver	185,259	230,030	6,108,194	6,777,644	32·97	29·46
Fox, blue	1,046	992	24,124	18,203	23·06	18·35
Fox, white	45,743	22,191	697,597	304,139	15·25	13·71
Fox, unspecified	960	669	7,828	5,982	8·15	8·94
Lynx	22,456	17,539	636,205	605,526	28·33	34·52
Marten or sable	24,586	24,433	537,199	642,204	21·85	26·28
Mink	154,279	139,673	1,701,577	2,267,835	11·03	16·24
Muskrat	1,630,231	1,607,897	2,148,605	2,250,971	1·32	1·40
Nutria	6	Nil	50	Nil	8·33	–
Otter	9,749	11,136	173,858	227,792	17·83	20·46
Rabbit	853,277	649,107	102,393	95,254	0·12	0·15
Raccoon	20,370	23,932	78,322	119,540	3·84	4·99
Skunk	105,547	202,836	84,054	200,663	0·80	0·99
Squirrel	629,580	2,147,114	89,744	386,743	0·14	0·18
Wild cat	1,884	1,565	11,273	7,264	5·98	4·64
Wolf [1]	11,654	8,826	129,782	117,559	11·14	13·32
Wolverine or carcajou	650	714	3,600	3,836	5·54	5·37
Domestic cat	244	381	39	85	0·16	0·22
Totals	**4,596,713**	**6,237,640**	**15,464,883**	**17,526,365**	–	–

[1] Coyote or prairie wolf pelts for Manitoba are included with wolf pelts.

At the close of the Great War, Montreal took a position as an international fur market, holding the first Canadian fur auction sale in 1920. At the sales held in Montreal during the year 1937, the pelts sold numbered 922,615 while the value amounted to $5,666,991. Fur auction sales are held also at Winnipeg, Edmonton, and Vancouver. An important industry in Canada is the manufacture of fur goods, such as coats, capes, scarves, muffs, etc. In 1936 the number of plants so engaged was 331, and the total value of output $14,474,935. Then there is the fur-dressing and -dyeing industry whose 14 plants in 1936 treated fur skins to the number of 6,221,363. The chief kinds of furs, with regard to number treated, were rabbit (3,256,879) and muskrat (955,181).

External Trade in Furs.—The important external markets for Canadian furs are London and New York; the trade tables for the twelve months ended June 30, 1937, show that of the total of $18,529,254 worth of raw furs exported, the United Kingdom took $10,384,268 and the United States $7,217,087. In 1667 exports of furs to France and the West Indies were valued at 550,000 francs. In 1850, the first year for which tables of the Customs Department are available, the value of raw furs exported was £19,395. The following table shows exports for recent years which are greatly in excess of the earlier values.

9.—Exports of Canadian Raw Furs by Leading Countries, and Kinds of Fur, years ended June 30, 1933-37.

Country and Kind.	Years ended June 30—				
	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
COUNTRY.					
United Kingdom	7,122,874	8,723,485	9,755,922	9,321,147	10,384,268
United States	2,684,231	4,156,005	4,626,876	6,015,782	7,217,087
Other countries	1,372,947	1,065,331	841,544	822,346	927,899
Totals	**11,180,052**	**13,944,821**	**15,224,342**	**16,159,275**	**18,529,254**
KIND OF FUR.					
Beaver	871,710	709,960	748,521	615,738	1,029,063
Fox, black and silver	4,550,906	5,264,026	5,708,024	6,260,371	7,439,955
Fox, other	1,676,757	2,076,921	2,818,386	2,522,428	1,670,475
Lynx	177,059	255,002	456,469	690,239	670,848
Marten	282,868	295,002	302,516	439,125	622,865
Mink	1,314,047	2,144,121	1,878,666	2,202,695	2,509,517
Muskrat	987,189	1,235,333	1,622,787	1,403,397	1,334,484
Other kinds	1,319,516	1,964,456	1,688,973	2,025,282	3,252,047
Totals	**11,180,052**	**13,944,821**	**15,224,342**	**16,159,275**	**18,529,254**

10.—Imports of Raw Furs by Leading Countries Whence Imported, and Kinds of Fur, years ended June 30, 1933-37.

Country and Kind.	Years ended June 30—				
	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
COUNTRY.					
United Kingdom	202,762	540,727	454,421	630,775	1,498,131
United States	2,078,078	2,842,870	1,719,154	3,101,902	3,299,089
Other countries	201,330	411,495	451,639	618,662	863,126
Totals	**2,482,170**	**3,795,092**	**2,625,214**	**4,351,339**	**5,660,346**
KIND OF FUR.					
Fox	218,075	275,823	176,474	350,216	410,933
Kolinsky	110,280	59,146	21,554	50,918	72,240
Mink	95,867	238,798	106,723	194,671	335,237
Muskrat	518,251	1,012,650	316,231	622,850	741,179
Persian lamb	155,168	319,593	284,898	604,366	854,055
Rabbit	240,691	280,826	422,673	662,434	933,694
Other kinds	1,143,838	1,608,256	1,296,661	1,865,884	2,313,008
Totals	**2,482,170**	**3,795,092**	**2,625,214**	**4,351,339**	**5,660,346**

Among living animals exported from Canada only two kinds of fur-bearing animals are separately classified by the Customs Department. These are foxes, separately recorded first in 1925, and mink, in 1931. Live foxes exported were valued at $1,388,459 in the fiscal year ended Mar. 31, 1925, $1,434,686 in 1926, when the highest value was recorded, and only $44,853 in 1938. Live mink exported were valued at $66,811 in 1931 and $39,888 in 1938. Foxes have been separately classified among imports of living animals since the fiscal year ended Mar. 31, 1928, when those imported were valued at $6,914 compared with $4,533 in 1938.

CHAPTER XI.—THE FISHERIES.

Section 1.—The Early Fisheries.

Fishing is one of the earliest and most historic industries of Canada. Leaving aside inconclusive evidence in favour of authentic record, one must ascribe to Cabot the honour of having discovered, in 1497, the cod banks of Newfoundland, when he first sighted the mainland of North America. Fishing may well be regarded as the first industry to be systematically prosecuted by Europeans in what is to-day the Canadian domain. It has since yielded a perennial harvest to both Europe and America. According to the Census of 1931, of 3,927,591 persons in Canada gainfully occupied in that year, 34,340 were reported as occupied in the fishing industry, that is, in primary fishing operations exclusive of canning and curing.

A more detailed account of the history of the Atlantic fisheries was given on p. 348 of the 1934-35 Year Book.

Section 2.—The Canadian Fishing Grounds.

The fishing grounds of the Dominion are of exceptional national value inasmuch as two of the four great sea-fishing areas of the world border on Canada. They fall naturally into three divisions: Atlantic, inland, and Pacific fishing grounds. A detailed description of each division, of the fish caught, and of the methods of fishing, will be found at pp. 222-225 of the 1932 Year Book.

Section 3.—The Government and the Fisheries.*

Upon the organization of the Dominion Government at Confederation, the administration of the Canadian fisheries was placed under the Department of Marine and Fisheries. Early in 1930 a Department of Fisheries, in charge of its own Minister, was organized. This Department now administers all the tidal fisheries (except those of the mainland portion of Quebec, which, by agreement, are under provincial administration), the non-tidal fisheries of Nova Scotia, and the fisheries of Yukon and the Northwest Territories. The non-tidal fisheries of New Brunswick, Prince Edward Island, Ontario, the Prairie Provinces, and British Columbia, and both the tidal and non-tidal fisheries of Quebec (except the fisheries of the Magdalen islands) are administered by the respective provinces, although the Dominion Department does certain protective work in non-tidal waters of New Brunswick, Prince Edward Island, and British Columbia. The right of fisheries regulation for all the provinces, however, rests with the Dominion Government. [See the Fisheries Act (22-23 Geo. V, c. 42).] The expenditure of the Dominion on the fisheries in the fiscal year 1937-38, including civil government salaries, contingencies, etc., was $2,162,111 and the revenue $119,824.

Conservation.—River and lake fisheries certainly, and sea fisheries probably, if left to themselves, conform to the economic law of diminishing returns. The Canadian Government, accordingly, has had for a main object the prevention of depletion by the enforcement of close seasons, the forbidding of obstructions and pollutions and the regulation of nets, gear, and fishing operations generally. In addition, an extensive system of fish culture has been organized; the Dominion, in 1937, operated 16 main hatcheries, 7 subsidiary hatcheries, 3 rearing stations, 8 salmon retaining ponds, and several egg collecting stations at a cost of $218,055, and distributed 61,831,780 trout and salmon eggs, fry, and older fish. The young fish are distributed gratis if the waters in which they are to be placed are suitable and are open to public fishing. Investigations and experiments directed toward the culture of the oyster have been carried on since 1929 in Prince Edward Island, by the Dominion Department of Fisheries, and are now being extended to areas in Nova Scotia. In New Brunswick, the oyster areas are under the jurisdiction of the provincial authorities, but in a portion of Shediac bay the areas have been transferred to the Dominion Department of Fisheries by the Provincial Government in order that certain oyster investigations might be begun there.

---

*Revised under the direction of W. A. Found, Deputy Minister, Department of Fisheries, Ottawa.

Direct Assistance.—On the Atlantic coast where conditions attending fishing operations make such a service desirable, a system has been established of broadcasting radio reports as to weather probabilities, bait and ice supplies, and ice conditions. Further, under authority of the Fish Inspection Act (R.S.C., 1927, c. 72) systems of instruction in improved methods of fish-curing and barrel-making have been in operation for several years.

By parliamentary vote the sum of $300,000 was made available for use by the Department of Fisheries during the fiscal year 1937-38 to aid, in co-operation with the provinces concerned, in the re-establishment of needy fishermen. Four provinces, where the fisheries are administered by the Dominion in whole or in part—Nova Scotia, New Brunswick, Prince Edward Island, and Quebec—entered into agreements with the Dominion authorities to carry out the purpose of this vote. In each of the four, the Department of Fisheries spent two dollars for each dollar spent by the Provincial Government in direct aid to fishermen who were in need of assistance and the total spendings from the departmental appropriation were $218,004. In the Maritime Provinces and the Magdalen islands loans were made to fishermen and associations of fishermen and the total number of these loans to fishermen was 9,176 and to fishermen's associations, 28.

In further effort to aid the fishermen by expanding the demand for their products, large-scale advertising is carried on by the Department of Fisheries. In the main, the advertising was carried on within the Dominion but in the fiscal year 1937-38 a substantial amount was expended in the United Kingdom with the particular object of increasing sales of Canadian canned lobster and canned salmon. In Canada many publications of different classes are distributed to the public in all parts of the country and direct attention to the merits of Canadian fish foods, generally.

Scientific Research.—Under the direction of the Fisheries Research Board of Canada (formerly the Biological Board of Canada), stations for the conduct of research into the numerous complex problems occurring in connection with the fisheries are established at Halifax, N.S., St. Andrews, N.B., Grand Rivière, Que., and Nanaimo and Prince Rupert, B.C. Another station, chiefly for oyster investigation work, is conducted by the Board at Ellerslie, P.E.I., and a sub-station for salmon investigations at Cultus Lake, B.C. A permanent staff of scientists is employed by the Board. The life histories of edible fishes, the bacteriology of fresh and cured fish, improved methods of handling and preparing fish, and numerous other practical problems have been taken up and papers dealing with them issued by the Board. Instructional courses for fishermen are given at some of the stations and information brought out by the station research is made available without charge to interested branches of the fishing industry.

International Problems.—Fisheries problems of international importance have arisen from time to time on both coasts of the Dominion, as well as in the Great Lakes area where problems are complicated by the number of State governments concerned. A major international problem has been the question of United States privileges in Atlantic fisheries of Canada. An outline of the history of this question may be found on pp. 351-352 of the 1934-35 Year Book. Since 1933, under the former *modus vivendi* plan, which grew out of the unratified treaty of 1888, United States fishing vessels have again been permitted to enter Canadian ports to buy bait and other fishing supplies.

Joint steps to deal with two important Pacific Coast fisheries problems have been taken in recent years by Canada and the United States—one problem the preservation of the halibut fishery of the Northern Pacific Ocean and Bering Sea, the other the protection, preservation, and extension of the sockeye salmon fisheries in the Fraser River system.

The first treaty relating to the halibut fishery was signed on Mar. 2, 1923. Under this treaty a close season for halibut fishing in each year was provided for and an international commission was set up to conduct an investigation into the fishery and the life history of the halibut. A further convention, signed at Ottawa on May 9, 1930, and ratified by the respective Governments on May 9, 1931, provided for the regulation of the fishery by the commission through the division of the convention waters into fishing areas, changing of dates for close seasons, and so on. A new convention was signed at Ottawa on Jan. 29, 1937, extending the regulatory powers of the commission. Steps taken by the international commission under the several conventions have resulted in steady improvement in the state of the halibut fishery in the waters concerned.

The Sockeye Salmon Fisheries Convention was signed at Washington on May 26, 1930, but exchange of ratifications did not take place until July 28, 1937, although the Canadian Parliament had given approval to the treaty several years before that time. The convention waters include not only the Fraser River watershed in British Columbia but also certain Canadian, United States, and international waters making up the Fraser approach and through which the Fraser River sockeye pass.

Under the sockeye treaty the International Pacific Salmon Fisheries Commission was set up in 1937, consisting of three members appointed by Canada and a like number appointed by the United States. The Commission, which has established its headquarters at New Westminster, B.C., is empowered by the Convention to make "a thorough investigation into the natural history of the Fraser River sockeye salmon, into the hatchery methods, spawning ground conditions, and other related matters", to conduct the sockeye salmon fish cultural operations in treaty waters, and to make recommendations to the Governments on matters concerning "removing or overcoming obstructions to the ascent of sockeye salmon, that may now exist or may from time to time occur, in any of the waters covered by this convention . . .".

Certain powers of regulation were also given the Commission by the Convention but one of the understandings on which the treaty was approved by the two countries was that "The commission shall not promulgate or enforce regulations until the scientific investigations provided for in the convention have been made covering two cycles of sockeye salmon runs, or eight years".

Fishing Bounties.—By an Act of 1882 (45 Vict., c. 18) for the development of the sea fisheries and the encouragement of boat-building, provision is made for the distribution, annually, among fishermen and the owners of fishing boats and vessels on the Atlantic waters, of $150,000 in bounties, representing the interest on the amount of the Halifax Award. An Act of 1891 (54-55 Vict., c. 42) increased the amount to $160,000, the details of the expenditure to be settled each year by Order in Council. For the year 1937, payment was made under authority of the Deep Sea Fisheries Act (R.S.C. 1927, c. 74) on the following basis: to owners of vessels entitled to receive bounty, $1 per registered ton, payment to the owner of any one vessel not to exceed $80; to vessel fishermen entitled to receive bounty, $7·60 each; to owners of boats measuring not less than 12 feet keel, $1 per boat; to boat fishermen entitled to receive bounty, $6·90 each. The total amount paid in 1937 was $159,857. Details of the distribution of bounties for the years 1934 to 1937 are as follows:—

1.—Government Bounties Paid to Fishermen, calendar years 1934-37.

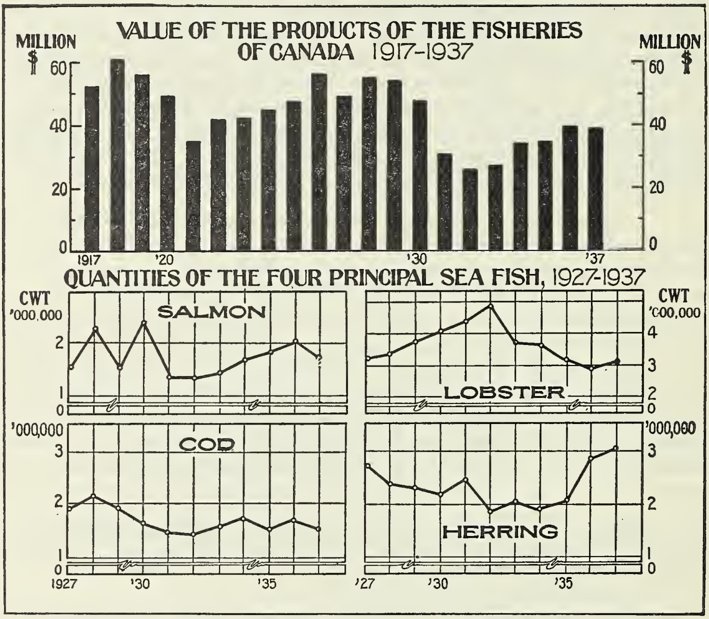
Province.	Numbers of Men who Received Bounties.				Amounts of Bounties Paid.[1]			
	1934.	1935.	1936.	1937.	1934.	1935.	1936.	1937.
					$	$	$	$
Prince Edward Island	2,058	2,129	2,129	2,062	12,028	12,815	13,495	15,748
Nova Scotia	11,770	11,093	11,022	10,437	76,538	74,843	77,349	86,409
New Brunswick	3,420	3,248	2,710	2,196	24,683	23,174	20,508	19,273
Quebec	8,008	8,135	7,714	5,120	46,727	49,133	48,625	38,427
Totals	**25,256**	**24,605**	**23,575**	**19,815**	**159,976**	**159,965**	**159,977**	**159,857**

[1] Amounts include payments to vessel and boat owners.

Collection of Statistics.—The fisheries statistics of Canada are issued under an arrangement for statistical co-operation between the Dominion Bureau of Statistics, the Dominion Department of Fisheries, and those branches of the different Provincial Governments having jurisdiction with regard to fisheries. Under this arrangement, the statistics of the catch and of the products marketed in the fresh state or domestically prepared are collected by the local fishery officers, checked in the Department of Fisheries, so far as operations in areas where the fisheries are under Dominion administration are concerned, and compiled in the Dominion Bureau of Statistics. In the case of manufactured fish products, schedules similar to those of other sections of the Census of Industry are sent by the Bureau to the operators of canneries, fish-curing establishments, etc., the fisheries officers assisting in securing expeditious and correct reports.

Section 4.—The Modern Fishing Industry.*

The latter half of the nineteenth century saw the commencement of expansion in the commercial fishing industry of Canada. In 1844 the estimated value of the catch was only $125,000. It doubled in the following decade and by 1860 had passed the million mark. Ten years later it reached $6,000,000 and this was again more than doubled by 1878. By 1900 it had reached a total of $21,000,000 and the growth continued with little interruption until 1918, when it reached the high record of $60,000,000. Since then there have been decreases in value, due to lower prices rather than to smaller catches. In 1937 the value was $38,976,294. It will be understood that the figures given represent the total value of fish as marketed, whether in a fresh, dried, canned, or otherwise prepared state. The numbers of employees engaged in the industry have increased in proportion to the catch, amounting in some years to over 90,000, and the capital investment has gone as high as $64,000,000. In 1937 the number of employees was 84,025, and the capital investment, $44,926,764.



Among the different kinds of fish, the cod of the Atlantic and the salmon of the Pacific, in the earlier years of the fishing industry, disputed the primacy; since 1895 salmon has definitely taken the lead, and the heavy packs and high prices of lobster have, in more recent years, sent cod down to third place. The value of output of the salmon fishery in the period 1869-1937 was approximately $474,000,000, and that of the cod fishery, $293,000,000. These facts have affected the relative standing of the provinces, British Columbia now occupying the leadership that in earlier times belonged to Nova Scotia. The record of production since 1870, production by provinces for the past six years, and the record of principal fish products for the past five years, are shown in Tables 2, 3, and 4, respectively.

---

* Revised by Miss F. A. Brown, Chief of the Fisheries and Animal Products Branch, Dominion Bureau of Statistics. This Branch publishes an Annual Report on the Fisheries Statistics of Canada, together with advance summaries on fish caught, marketed, and prepared, by provinces. These may be obtained from the Dominion Statistician.

2.—Total Values of the Products of the Fisheries of Canada, calendar years, 1870-1937.

Year.	Value.	Year.	Value.	Year.	Value.	Year.	Value.
	$		$		$		$
1870	6,577,391	1887	18,386,103	1904	23,516,439	1921	34.931,935
1871	7,573,199	1888	17,418,508	1905	29,479,562	1922	41,800,210
1872	9,570,116	1889	17,655,254	1906	26,279,485	1923	42,565,545
1873	10,754,997	1890	17,714,900	1907	25,499,349	1924	44,534,235
1874	11,681,886	1891	18,977,874	1908	25.451,085	1925	47,942,131
1875	10,350,385	1892	18,941,169	1909	29,629,169	1926	56,360,633
1876	11,117,000	1893	20,686,659	1910	29,965,142	1927	49,123.609
1877	12,005,934	1894	20,719,570	1911	34,667,872	1928	55,050,973
1878	13,215,678	1895	20,199,338	1912	33,389,464	1929	53,518,521
1879	13,529,254	1896	20,407,424	1913	33,207,748	1930	47,804,216
1880	14,499,979	1897	22,783,544	1914	31,264,631	1931	30,517,306
1881	15,817,162	1898	19,667,121	1915	35,860,708	1932	25,957,109
1882	16,824,092	1899	21,891,706	1916	39,208,378	1933	27,496,946
1883	16,958,192	1900	21,557,639	1917	52,312,044	1934	34,022,323
1884	17,766,404	1901	25,737,153	1918	60,259,744	1935	34,427,854
1885	17,722,973	1902	21,959,433	1919	56,508,479	1936	39,165,055
1886	18,679,288	1903	23,100.878	1920	49,241,339	1937	38,976,294

3.—Total Values of the Products of the Fisheries, by Provinces, calendar years 1932-37.

Province.	1932.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$	$
Prince Edward Island	988,919	842,345	963,926	899,685	953,029	870,299
Nova Scotia	6,557,943	6,010,601	7,673,865	7,852,899	8,905,268	9,229,834
New Brunswick	2,972,682	3,000,045	3,679,970	3,949,615	4,399,735	4,447,688
Quebec	1,815,544	2,128,471	2,306,517	1,947,259	2,108,404	1,892,036
Ontario	2,147,990	2,089,842	2,218,550	2,852,007	3,209,422	3,615,666
Manitoba	1,204,892	1,076,136	1,465,358	1,258,335	1,667,371	1,796,012
Saskatchewan	186,174	186,417	219,772	252,059	367,025	527,199
Alberta	153,789	144,518	245,405	225,741	309,882	433,354
British Columbia	9,909,116	12,001,471	15,234,335	15,169,529	17,231,534	16,155,439
Yukon	20,060	17,100	14,625	20,725	13,385	8,767
Totals	**25,957,109**	**27,496,946**	**34,022,323**	**34,427,854**	**39,165,055**	**38,976,294**

In Table 4 the quantities given are those of primary products caught, but the values are those of all products, primary and secondary, marketed. The grand totals are also subdivided so as to show the values that the sea fisheries and inland fisheries, respectively, yield, as compared with the whole. More detailed tables of quantities and values of both sea and inland fish marketed, such as those published on pp. 326-328 of the 1938 Year Book, may be found at pp. 17 to 23 of the Report on Fisheries Statistics, 1937, published by the Dominion Bureau of Statistics.

4.—Quantities Caught and Values of All Products Marketed of the Chief Commercial Fishes of Canada, 1933 to 1937.

Kind of Fish.	1933.	1934.	1935.	1936.	1937.	Increase or Decrease 1937 Compared with 1936.
Salmon cwt.	1,456,501	1,696,856	1,824,205	2,029,704	1,724,213	−305,491
$	9,758,346	12,875,257	12,540,307	13,867,513	12,370,219	−1,497,294
Lobsters cwt.	374,916	361,992	319,969	283,273	309,950	+26,677
$	3,524,355	4,269,764	4,378,742	4,383,428	4,633,429	+250,001
Cod cwt.	1,561,647	1,714,059	1,539,150	1,699,974	1,523,626	−176,348
$	2,598,756	3,327,507	2,758,140	3,331,750	3,140,230	−191,520
Herring cwt.	2,056,706	1,901,874	2,060,320	2,852,381	3,057,503	+205,122
$	1,747,863	1,799,967	1,817,540	2,576,533	2,556,883	−19,650
Whitefish cwt.	152,135	144,615	147,456	144,603	173,675	+29,072
$	1,136,400	1,358,692	1,432,072	1,525,700	1,887,889	+362,189

4.—Quantities Caught and Values of All Products Marketed of the Chief Commercial Fishes of Canada, 1933 to 1937—concluded.

Kind of Fish.	1933.	1934.	1935.	1936.	1937.	Increase or Decrease 1937 Compared with 1936.
Halibut[1]....cwt.	200,824	123,152	132,130	138,468	150,583	+12,115
$	1,694,405	1,134,307	1,285,587	1,441,310	1,598,190	+156,880
Sardines....bbl.	130,485	191,549	187,666	247,238	159,481	−87,757
$	623,976	1,039,002	1,335,798	1,598,562	1,526,505	−72,057
Haddock....cwt.	268,881	356,068	368,426	403,010	388,823	−14,187
$	832,029	1,075,529	1,129,695	1,291,905	1,296,313	+4,408
Pickerel....cwt.	106,272	122,512	109,548	145,635	143,020	−2,615
$	623,343	844,848	801,822	1,109,397	1,043,532	−65,865
Trout....cwt.	50,932	58,977	66,325	72,973	70,588	−2,385
$	525,192	594,354	768,568	842,738	1,031,740	+189,002
Pilchards....cwt.	121,013	860,103	911,411	889,037	961,485	+72,448
$	77,464	549,910	670,328	667,313	902,619	+235,306
Blue pickerel....cwt.	42,164	24,321	51,230	68,995	94,496	+25,501
$	257,201	116,741	302,259	614,055	812,665	+198,610
Mackerel....cwt.	263,316	190,818	160,495	227,638	239,163	+11,525
$	396,306	421,013	308,721	461,866	635,740	+173,874
Smelts....cwt.	77,699	59,909	79,409	94,868	67,343	−27,525
$	495,632	557,538	588,333	655,656	444,473	−211,183
Saugers....cwt.	24,914	48,695	35,044	47,711	82,676	+34,965
$	115,635	242,889	155,975	263,579	377,884	+114,305
Hake and cusk....cwt.	177,514	246,179	189,756	228,047	229,225	+1,178
$	149,211	257,340	221,341	316,200	299,004	−17,196
Scallops....gal.	86,344	89,890	133,225	170,762	183,755	+12,993
$	161,779	168,415	207,641	334,424	296,529	−37,895
Tullibee....cwt.	42,300	44,076	39,721	59,265	55,966	−3,299
$	265,204	204,984	225,808	276,464	284,288	+7,824
Perch....cwt.	40,945	72,766	72,001	32,258	35,231	+2,973
$	242,123	384,889	401,034	268,653	277,220	+8,567
Ling cod....cwt.	40,282	47,806	62,841	68,932	42,858	−26,074
$	198,570	281,644	326,029	392,147	275,817	−116,330
Clams[2]....bbl.	38,281	42,657	68,972	71,637	71,236	−401
$	107,522	111,885	173,626	192,910	240,184	+47,274
Swordfish....cwt.	17,137	14,091	22,339	17,853	15,020	−2,833
$	208,038	176,640	264,097	230,798	238,165	+7,367
Pollock....cwt.	52,905	85,037	82,048	126,345	239,845	+113,500
$	48,939	95,024	82,745	114,200	222,208	+108,008
Pike....cwt.	41,146	37,195	44,761	54,370	51,320	−3,050
$	112,312	149,821	181,263	225,589	215,306	−10,283
Oysters....bbl.	22,424	24,964	27,113	26,965	24,687	−2,278
$	126,533	158,241	178,126	189,922	180,079	−9,843
Eels....cwt.	27,404	25,238	25,091	23,440	20,980	−2,460
$	148,995	159,674	162,370	153,495	144,277	−9,218
Soles....cwt.	10,757	14,469	16,578	24,301	27,456	+3,155
$	56,901	71,741	79,246	108,409	123,398	+14,989
Grand Totals[3]..... $	**27,496,946**	**34,022,323**	**34,427,854**	**39,165,055**	**38,976,294**	**−188,761**
Totals, Sea Fish.... $	23,433,588	29,241,738	29,175,400	32,951,504	31,984,047	−967,457
Totals, Inland Fish. $	4,063,358	4,780,585	5,252,454	6,213,551	6,992,247	+778,696

---

[1] Previous to 1934 the totals for halibut included landings at British Columbia ports by United States vessels, whereas from 1934 on the United States landings are excluded from the statistics and the figures cover landings by Canadian vessels only.

[2] Prior to 1935 clams and quahaugs were combined.

[3] Including other items not specified above.

Quantities and Values in Recent Years.—The values upon which the figures of Table 5 are based are those of the fish products as marketed, *i.e.*, they include values added by processing such as the canning, curing, etc., of fish products. The indexes of volume, on the other hand, are based upon the quantities of fish reported as caught and landed. The indexes of volume for the individual kinds of fish are calculated directly from the quantities reported in each year but, since the quantities of different kinds of fish are reported in different units, the indexes of volume for the totals of sea and inland fish are calculated from the percentage change, due to variation in quantity from one year to the next, obtained by taking the quantities of the later year at the prices of the previous year. The changes in the indexes each year are, therefore, weighted by the prices of the previous year.

5.—Percentages of Total Value and Indexes of Volume of Fisheries Production, by Principal Kinds of Sea and Inland Fish, 1926-37.

NOTE.—Based on values as marketed and quantities caught..

Kind of Fish.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Percentages of Total Value.												
Salmon	34·8	30·7	32·5	28·0	37·1	26·1	31·0	34·8	37·9	36·4	35·4	31·7
Lobster	10·4	11·0	9·4	10·7	10·9	16·5	18·3	12·8	12·6	12·7	11·2	11·9
Cod	12·4[1]	9·9	11·4	10·1	9·0	9·3	8·5	9·5	9·8	8·0	8·5	8·1
Herring	5·7	6·8	5·6	6·0	5·5	7·6	5·7	6·4	5·3	5·3	6·6	6·6
Whitefish	3·8	4·5	4·0	4·6	3·8	4·7	4·6	4·1	4·0	4·2	3·9	4·8
Halibut[2]	8·8	8·0	6·9	9·0	6·0	5·8	4·7	6·2	3·3	3·7	3·7	4·1
Sardines	2·1	2·1	2·3	3·0	2·2	2·7	1·6	2·3	3·1	3·9	4·1	3·9
Haddock	3·1	3·0	3·2	3·6	3·9	4·5	4·3	3·0	3·2	3·3	3·3	3·3
Pickerel	2·5	2·7	2·9	2·7	2·0	2·5	2·7	2·3	2·5	2·3	2·8	2·7
Trout	1·9	2·8	2·4	2·5	2·2	2·3	2·2	1·9	1·7	2·2	2·2	2·6
Pilchards	2·2	3·7	4·7	4·1	3·3	2·6	1·5	0·3	1·6	1·9	1·7	2·3
Blue pickerel	0·3	0·4	0·5	0·6	0·9	0·6	0·7	0·9	0·3	0·9	1·6	2·1
Mackerel	0·8	1·2	1·0	1·0	1·3	1·6	1·1	1·4	1·2	0·9	1·2	1·6
Smelts	2·1	2·3	2·3	2·2	1·8	2·1	2·7	1·8	1·6	1·7	1·7	1·1
Saugers	[5]	[5]	0·1	0·1	0·1	0·2	0·5	0·4	0·7	0·5	0·7	1·0
Hake and cusk	0·4	0·5	0·7	1·0	0·9	0·6	0·5	0·5	0·8	0·6	0·8	0·8
Scallops	0·3	0·4	0·3	0·2	0·2	0·1	0·3	0·6	0·5	0·6	0·9	0·8
Ling cod	[1]	0·8	0·7	0·8	0·7	0·8	0·6	0·7	0·8	0·9	1·0	0·7
Tullibee	1·1	1·3	1·1	1·3	1·0	0·6	0·9	1·0	0·6	0·7	0·7	0·7
Perch	0·4	0·6	1·4	1·2	0·7	0·8	1·0	0·9	1·1	1·2	0·7	0·7
Clams and quahaugs[3]	0·5	0·6	0·6	0·6	0·7	0·7	0·6	0·4	0·3	0·5	0·5	0·6
Swordfish	0·4	0·3	0·2	0·2	0·4	0·8	0·4	0·8	0·5	0·8	0·6	0·6
Pike	0·7	0·7	0·7	0·8	0·5	0·5	0·5	0·4	0·4	0·5	0·6	0·6
Pollock	0·2	0·1	0·2	0·2	0·2	0·2	0·2	0·2	0·3	0·2	0·3	0·6
Oysters	0·4	0·4	0·4	0·4	0·4	0·6	0·4	0·5	0·5	0·5	0·5	0·5
Eels	0·4	0·3	0·4	0·3	0·3	0·4	0·4	0·5	0·5	0·5	0·4	0·4
Totals, Sea Fish[4]	86·9	84·6	84·8	83·9	86·7	84·5	83·8	85·2	85·9	84·7	84·1	82·1
Totals, Inland Fish[4]	13·1	15·4	15·2	16·1	13·3	15·5	16·2	14·8	14·1	15·3	15·9	17·9
Grand Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**160·0**	**100·0**	**100·0**
Indexes of Volume, (1926=100).												
Salmon	100·0	70·7	104·9	71·1	108·4	61·6	61·1	66·8	77·8	83·7	93·1	79·1
Lobster	100·0	93·3	98·0	109·8	120·0	128·4	142·4	110·5	106·7	94·2	83·4	91·3
Cod	100·0[6]	73·8	80·1	73·8	61·9	54·5	53·2	58·2	63·8	57·3	63·4	56·8
Herring	100·0	112·5	98·9	95·7	90·5	108·5	76·9	84·9	78·5	85·0	117·7	126·2
Whitefish	100·0	97·4	94·8	103·0	89·0	82·0	72·6	79·8	75·9	77·4	75·9	91·1
Halibut[2]	100·0	88·2	97·1	98·8	83·1	62·0	57·0	59·1	36·2	38·9	40·7	44·3
Sardines	100·0	100·9	165·2	144·0	74·8	36·8	38·6	75·4	110·6	108·4	142·8	92·1
Haddock	100·0	84·8	97·0	109·8	97·9	73·2	72·5	54·2	71·6	74·2	81·1	78·3
Pickerel	100·0	111·0	113·1	102·0	81·8	73·2	71·0	84·3	97·2	86·9	115·5	113·5
Trout	100·0	117·0	116·5	115·5	88·7	73·0	63·8	64·7	75·0	84·3	92·7	89·7
Pilchards	100·0	141·2	166·0	178·1	154·8	151·8	91·5	12·5	88·7	94·0	91·7	99·1
Blue pickerel	100·0	102·5	70·8	85·0	195·0	177·8	133·6	138·7	80·0	168·5	227·0	310·8
Mackerel	100·0	137·5	107·2	132·2	154·6	170·0	154·6	228·0	165·3	139·0	197·1	207·2
Smelts	100·0	89·7	99·6	91·0	71·6	80·7	104·2	84·2	64·9	86·1	102·8	73·0
Saugers	[5]	100·0[5]	166·8	332·3	364·0	743·0	770·0	1,012·0	1,979·0	1,424·0	1,939·0	3,360·0
Hake and cusk	100·0	117·4	167·7	224·7	194·9	113·7	84·8	117·5	163·0	125·6	151·0	151·9
Scallops	100·0	166·5	113·4	77·2	80·3	50·8	100·9	372·0	387·3	574·0	736·0	792·0
Ling cod	100·0[6]	100·5	102·1	97·6	99·8	102·6	80·4	81·1	96·2	126·5	138·7	86·2
Tullibee	100·0	120·0	102·6	96·2	61·1	42·2	46·9	41·7	43·4	39·1	58·4	55·1
Perch	100·0	113·4	174·3	219·8	143·5	168·6	200·0	134·4	238·5	236·0	105·7	115·5
Clams and quahaugs[3]	100·0	106·4	116·8	124·9	119·3	103·4	92·0	70·6	78·6	127·2	132·1	131·4
Swordfish	100·0	56·4	62·5	49·0	92·2	97·6	80·0	132·5	108·2	172·7	138·0	116·1
Pike	100·0	97·3	86·5	113·9	77·9	62·7	57·1	56·7	51·3	61·7	75·0	70·8
Pollock	100·0	40·6	74·8	62·7	60·5	58·9	89·8	61·2	98·4	95·0	146·2	277·6
Oysters	100·0	97·3	96·6	112·1	107·6	109·3	103·6	100·8	112·1	121·9	121·1	111·0
Eels	100·0	65·1	104·9	59·4	67·0	82·0	87·8	112·0	103·1	102·5	95·8	85·8
Totals, Sea Fish[4]	100·0	85·5	103·1	92·6	102·3	79·1	76·7	77·5	84·5	86·8	94·9	88·2
Totals, Inland Fish[4]	100·0	105·0	104·7	108·1	92·1	83·0	77·8	83·4	89·0	90·0	95·8	106·8
Grand Totals	**100·0**	**87·8**	**103·3**	**94·8**	**101·2**	**79·8**	**77·0**	**78·4**	**85·2**	**87·3**	**95·0**	**91·0**

[1] Ling cod was included with cod in 1926. [2] Landings at British Columbia ports by United States vessels excluded in 1934 and later years. [3] Clams only in 1935 and later years. [4] Totals include minor items not specified. [5] First reported in 1927 and in that year the value was too small to be represented as a percentage. For volume index, 1927=100. [6] See footnote 1. The average of the years 1927-30 was taken as the quantity of ling cod for 1926 and this was deducted from the quantity of cod reported for 1926.

6.—Numbers of Fish-Canning and -Curing Establishments, by Provinces, 1936 and 1937.

Kind of Establishment.	P.E.I.	N.S.	N.B.	Que.	B.C.	Canada.
	No.	No.	No.	No.	No.	No.
1936.						
Lobster canneries	84	76	80	64	Nil	304
Salmon canneries	Nil	2	Nil	20	46	68
Clam canneries	2	3	10	Nil	2	17
Sardine and other fish canneries	1	7	4	1	2	15
Fish-curing establishments	6	76	28	47	31	188
Freezing plants	Nil	2	4	7	2	15
Reduction plants	“	6	3	Nil	8	17
Totals, 1936	**93**	**172**	**129**	**139**	**91**	**624**
1937.						
Lobster canneries	74	71	78	54	Nil	277
Salmon canneries	Nil	2	Nil	33	37	72
Clam canneries	3	5	11	Nil	2	21
Sardine and other fish canneries	1	6	3	“	2	12
Fish-curing establishments	8	69	26	44	31	178
Freezing plants	Nil	4	5	8	2	19
Reduction plants	“	4	2	1	11	18
Totals, 1937	**86**	**161**	**125**	**140**	**85**	**597**

7.—Values of Materials Used and of Products of Fish-Canning and -Curing Establishments, 1933-37.

Material and Product.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Materials Used—					
Fish	8,178,543	11,638,820	10,958,895	11,916,080	12,179,219
Edible oils	[1]	[1]	[1]	137,144	134,426
Salt	216,618	236,185	212,554	256,651	208,510
Containers	2,321,918	3,345,792	3,152,924	3,672,437	3,353,174
Other	243,210	346,363	448,349	477,626	443,452
Totals, Materials Used	**10,960,289**	**15,567,160**	**14,772,722**	**16,459,938**	**16,318,781**
Products—					
Fish marketed for consumption, fresh	4,337,130	4,897,000	5,204,465	6,430,174	7,056,041
Fish canned, cured, or otherwise prepared	13,043,193	19,159,927	18,253,891	20,254,627	19,032,584
Totals, Products	**17,380,323**	**24,056,927**	**23,458,356**	**26,684,801**	**26,088,625**

[1] Included with "Other".

Capital and Employees.—The total capital invested reached an all-time record of $64,026,297 in 1930, declined successively for three years to $40,914,057 in 1933, rose again in 1935 and in 1936, and in 1937 declined slightly to $44,926,764. The number of persons employed in the primary and secondary operations connected with the fishing industry declined from 80,450 in 1929 to 74,882 in 1931, rose steadily since then to 83,436 in 1934, dropped in 1935 to 82,918, rose again to 86,973 in 1936 and declined in 1937 to 84,025. The 1937 figure is the second highest in the period 1920 to 1937.

8.—Numbers and Capital Values of Fishing Vessels, Boats, Nets, Traps, etc., Used in the Fisheries of Canada, and of Establishments Processing the Products, 1936 and 1937.

Equipment or Kind of Establishment.	1936.		1937.	
	Number.	Value.	Number.	Value.
		$		$
Sea Fisheries—				
Steam trawlers	3	68,750	3	75,000
Steam fishing vessels	6	150,000	6	150,000
Sailing, gasoline and diesel vessels	1,000	4,170,500	999	4,337,314
Gasoline and diesel boats	20,155	7,645,067	19,880	7,610,194
Sail and rowboats	15,158	425,278	13,695	384,626
Packers, carrying boats, and scows	585	1,676,335	456	690,274
Gill nets	71,594	929,595	69,410	855,658
Salmon drift nets	13,054	1,146,022	12,543	1,043,442
Salmon trap nets	949	367,260	959	391,480
Trap nets, other	551	264,860	509	263,620
Smelt nets	17,289	372,074	15,725	357,650
Pound nets	62	8,680	51	7,650
Oulachon nets	18	540	27	810
Shrimp nets	25	1,775	28	2,350
Salmon purse seines	220	248,500	208	259,200
Salmon drag seines	9	5,800	21	10,750
Seines, other	843	213,575	882	257,675
Weirs	374	299,093	393	319,695
Skates of gear	2,833	52,975	3,654	66,044
Tubs of trawl	22,055	288,887	21,770	293,383
Other trawl	14	2,050	13	2,150
Hand lines	72,906	161,034	70,197	174,415
Crab traps	7,265	27,225	8,741	33,272
Eel traps	395	734	625	5,898
Lobster traps	2,134,762	2,321,774	2,210,517	2,580,096
Lobster pounds	54	69,830	52	67,280
Oyster rakes	1,605	6,423	1,873	5,803
Scallop drags	835	23,278	1,025	23,362
Quahaug rakes	184	628	170	583
Fishing piers and wharves	1,759	665,020	1,753	594,810
Freezers and ice-houses	620	233,800	715	256,880
Small fish- and smoke-houses	8,161	701,633	7,405	699,358
Other gear	-	35,986	-	62,215
Total Values, Sea Fisheries	-	**22,584,981**[1]	-	**21,882,937**
Inland Fisheries—				
Fish carriers	27	125,850	27	126,700
Tugs	99	653,450	91	609,633
Gasoline boats	1,682	888,723	1,575	900,418
Skiffs and canoes	3,608	119,972	3,753	109,871
Gill nets	-	1,547,136	-	1,791,202
Seines	168	21,533	344	26,986
Trap nets	[2]	[2]	1	700
Pound nets	1,152	542,628	1,094	555,927
Hoop nets	1,116	24,929	1,136	27,283
Dip and roll nets	97	402	93	1,184
Nets, other	[2]	[2]	767	22,940
Lines	2,876	19,581	1,250	8,377
Weirs	919	125,950	60	700
Spears	231	1,687	86	603
Eel traps	130	260	639	89,590
Fish wheels	9	765	10	850
Fishing piers and wharves	546	164,943	500	152,373
Freezers and ice-houses	915	375,635	855	432,195
Small fish- and smoke-houses	196	60.125	157	55,910
Total Values, Inland Fisheries	-	**4,673,569**[2]	-	**4,913,442**
Fish-Canning and -Curing Establishments—[3]				
Salmon canneries	68	9,365,076	72	8,399,825
Fish-curing establishments	188	4,606,602	178	4,500,166
Sardine and other fish canneries	15	1,690,575	12	1,837,321
Lobster canneries	304	1,606,073	277	1,660,901
Reduction plants	17	798,694	18	1,113,559
Freezing plants	15	433,680	19	412,557
Clam canneries	17	113,892	21	206,056
Totals for Fish-Canning and -Curing Establishments	**624**	**18,614,592**	**597**	**18,130,385**
Grand Totals, Capital Invested in Fisheries	-	**45,873,142**[1]	-	**44,926,764**

---

[1] Revised since publication of the 1938 Year Book. [2] Trap nets and nets, other, not reported prior to 1937. [3] Comprises values of land, buildings and machinery, products and supplies on hand, accounts and bills receivable, and cash.

9.—Numbers of Persons Employed in the Fisheries of Canada and in Processing Establishments Connected Therewith, 1935-37.

Employed in—	Sea Fisheries.			Inland Fisheries.		
	1935.	1936.	1937.	1935.	1936.	1937.
Steam trawlers	70	75	75	Nil	Nil	Nil
Vessels	4,948	5,083	5,201	[1]	[1]	[1]
Boats	47,845	48,948	46,788	8,252	8,994	8,699
Packers, carrying boats, and scows	901	965	594	123	132	118
Fishing not in boats	3,069	3,300	3,140	3,349	4,238	5,366
Totals, Fishermen[2]	**56,833**	**58,371**	**55,798**	**11,724**	**13,364**	**14,183**

[1] Included with boats. [2] These totals include all individuals employed in primary fishing operations irrespective of the period of employment. The census figure for 1931, given on p. 296, includes only those whose main occupation was fishing.

10.—Numbers of Employees in Fish-Canning and -Curing Establishments, 1935-37.

Employed in—	1935.			1936.			1937.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Lobster canneries	2,269	3,312	5,581	2,278	3,256	5,534	2,077	3,099	5,176
Salmon canneries	2,509	2,331	4,840	2,960	2,553	5,513	2,305	2,174	4,479
Clam canneries	64	158	222	94	177	271	120	196	316
Sardine and other fish canneries	311	335	646	374	354	728	403	427	830
Fish-curing establishments	2,376	265	2,641	2,421	307	2,728	2,309	322	2,631
Freezing plants	163	21	184	138	10	148	214	43	257
Reduction plants	239	8	247	308	8	316	346	9	355
Totals	**7,931**	**6,430**	**14,361**	**8,573**	**6,665**	**15,238**	**7,774**	**6,270**	**14,044**

11.—Employees and Salaries and Wages in Fish-Canning and -Curing Establishments, 1920-37.

Year.	On Salaries.		On Wages.		Contract and Piece-Workers.		Totals.	
	No.	Amount.	No.	Amount.	No.	Amount.	No.	Amount.
		$		$		$		$
1920	651	759,176	13,137	3,180,701	4,711	916,413	18,499	4,856,290
1921	487	551,330	10,534	2,023,040	3,083	399,016	14,104	2,973,386
1922	614	682,535	11,848	2,358,780	4,115	600,415	16,577	3,641,730
1923	585	681,101	11,265	2,443,971	3,597	644,842	15,447	3,769,914
1924	574	755,631	10,583	2,588,717	4,379	890,413	15,536	4,234,761
1925	632	806,418	10,687	3,166,045	4,953	998,704	16,272	4,971,167
1926	546	733,760	11,579	3,807,533	5,283	1,081,544	17,408	5,622,837
1927	639	871,211	11,343	3,769,791	4,715	732,949	16,697	5,373,951
1928	630	853,800	10,579	3,539,070	4,225	868,226	15,434	5,261,096
1929	660	951,669	11,122	3,668,802	4,585	791,384	16,367	5,411,855
1930	591	918,952	9,967	3,383,902	5,164	1,023,609	15,722	5,326,463
1931	540	692,270	9,577	2,069,153	2,954	421,452	13,071	3,182,875
1932	486	602,760	9,799	1,741,404	3,439	477,714	13,724	2,821,878
1933	473	558,500	9,453	1,728,885	4,116	736,683	14,042	3,024,068
1934	548	676,124	9,642	2,193,995	4,612	684,956	14,802	3,555,075
1935	550	703,075	9,468	2,171,478	4,343	679,395	14,361	3,553,948
1936	558	734,678	10,073	2,544,903	4,607	724,269	15,238	4,003,850
1937	602	722,651	9,671	2,632,120	3,771	687,794	14,044	4,042,565

Trade.—The domestic consumption of fish is relatively small in Canada and the trade depends largely upon foreign markets. From 60 to 70 p.c. of the annual capture is an average export, of which the United States takes approximately one-half and the United Kingdom one-fourth. In the calendar year 1937, total exports amounted to $28,902,152, of which $14,004,575 went to the United States and $6,721,764 to the United Kingdom. A further division shows that $11,178,572 went to British Empire countries and $17,723,580 to foreign countries. The most important single export is canned salmon (to the United Kingdom and European markets), followed by fresh lobster, canned lobster, fresh salmon, fresh whitefish, and dried cod (to the West Indies, South America, etc.). For fresh fish the United States is the chief market. Canadian imports of fishery products in the calendar year 1937 amounted to $2,877,131. For convenience of the reader a general review of the import and export trade in fish for 37 years past is given in Table **12,** by fiscal years, while Table **13** gives a comparative record of exports, by countries, during the calendar years 1936 and 1937. A complete analysis of imports and exports, as well as of production, is given in the Report on Fisheries Statistics, 1937, issued by the Dominion Bureau of Statistics.

12.—Values of Exports and Imports of Fish and Fish Products, fiscal years 1902-38.

Note.—In this table "Exports" includes seal skins, fish oils, and whale oil, and "Imports" includes turtles, whalebone, shells and their products, fur skins of marine animals, fish oils, and ambergris, in addition to fishery products as shown in Tables **12** and **13** of Chapter XVI on External Trade, in this volume.

Fiscal Year.	Exports, Fisheries, Domestic.	Imports of Fish, etc., for Home Consumption.		Fiscal Year.	Exports, Fisheries, Domestic.	Imports of Fish, etc., for Home Consumption.	
		Dutiable.	Free.			Dutiable.	Free.
	$	$	$		$	$	$
1902	14,143,294	620,706	525,459	1921	33,615,119	2,416,152	1,876,303
1903	11,800,184	659,717	743,703	1922	29,578,392	2,172,850	996,763
1904	10,759,029	734,800	850,945	1923	27,816,935	2,066,300	899,531
1905	11,114,318	752,558	751,402	1924	30,925,769	1,878,336	648,696
1906	16,025,840	814,540	1,234,563	1925	33,967,009	2,064,222	997,059
1907[1]	10,362,142	735,045	924,046	1926	37,487,517	1,949,269	641,240
1908	13,867,367	838,037	1,103,649	1927	36,365,454	2,347,890	909,188
1909	13,319,664	784,176	925,173	1928	35,660,287	2,595,591	1,181,067
1910	15,663,162	952,522	820,183	1929	37,962,929	2,956,182	1,218,386
1911	15,675,544	1,175,072	820,019	1930	37,185,185	3,078,385	1,100,335
1912	16,704,678	1,261,096	1,148,522	1931	29,693,978	2,393,870	988,689
1913	16,336,721	1,608,663	910,923	1932	24,854,088	1,726,622	701,632
1914	20,623,560	1,558,663	773,109	1933	17,425,228	1,281,466	425,138
1915	19,687,068	1,155,186	701,112	1934	20,972,444	1,278,497	539,456
1916	22,377,977	895,371	695,702	1935	23,294,508	1,799,936	726,168
1917	24,889,253	1,347,511	1,128,768	1936	25,572,665	1,877,831	798,380
1918	32,602,151	1,039,585	1,884,041	1937	26,702,831	1,942,849	1,101,926
1919	37,137,072	1,054,848	2,128,970	1938	28,510,056	1.847,339	1,163,709
1920	42,227,996	2,605,379	1,446,493				

[1] Nine months.

13.—Exports of the Fisheries, the Produce of Canada, by Principal Countries, calendar years 1936 and 1937.

Exports to—	1936.	1937.	Exports to—	1936.	1937.
	$	$		$	$
British Empire.			**Foreign Countries.**		
United Kingdom	5,781,730	6,721,764	Belgium	150,618	139,119
Africa, British South	420,847	602,936	Brazil	16,071	100.561
Africa, British West	27,052	35,509	China	165,478	99,912
Bermuda	37,681	37,642	Cuba	220,911	239,980
British India	35,726	41,547	Denmark	16,507	8,135
Ceylon	4,380	6,324	France	896,669	784,746
Straits Settlements	15,906	38,496	Germany	79,493	556,422
British Guiana	134,939	160,597	Haiti	93,991	104,630
Barbados	36,854	67,965	Italy	2,891	8,133
Jamaica	342,104	422,991	Japan	624,903	585,193
Trinidad and Tobago	243,389	345,733	Netherlands	72,339	33,578
Hong Kong	29,452	84,403	Dutch Guiana	15,370	15,170
Newfoundland	22,129	19,648	Norway	73,354	68,666
Australia	1,668,594	1,963,688	Portugal	93	Nil
Fiji	73,453	55,536	Portuguese Africa	23,782	35,882
New Zealand	391,466	408,081	Santo Domingo	87,904	59,297
Palestine	11,724	12,716	Sweden	273,618	340,151
			United States	12,917,592	14,004,575
			Philippine Islands	20,226	92,875
			Puerto Rico	113,664	215,709
Totals, British Empire[1]	**9,388,184**	**11,178,572**	**Totals, Foreign Countries**[1]	**16,009,918**	**17,723,580**
			Grand Totals, Exports	**25,398,102**	**28,902,152**

[1] Totals include other countries not specified.

Fisheries Production, 1938.—Preliminary reports for 1938 indicate that there will be some increase in the total landings of sea fish and shellfish but that the landed value of the catch to the fishermen will be smaller than in 1937. Weakened prices, notably in the case of lobsters, adversely affected the value return for 1938. At the time of writing (Mar., 1939) the statistics of fresh-water catch and landed value for 1938 are not available.

CHAPTER XII.—MINES AND MINERALS.*

NOTE.—An article on the geology of Canada will be found at pp. 14-25 of the present edition of the Year Book.

Historical Sketch.—The early settlements in the lower St. Lawrence valley were hemmed in by the non-agricultural rock formations of the Canadian Shield which approached closely to the first points of colonization. An important epoch of Canadian expansion, about the middle of the 19th century, coincided with the surmounting of the transportation difficulties presented by the arm of the Canadian Shield which crosses the St. Lawrence river above Montreal and is responsible for the series of rapids between that city and lake Ontario. A second and greater period of expansion followed again when railways bridged the barriers of rocky country separating lake Superior in the east and the Pacific coast in the west from the extensive agricultural plains of the Prairie Provinces. These forbidding areas, with their exposed ancient rocks, their forests, and their lakes, which impeded Canadian growth and agricultural settlement until nearly the end of the 19th century, have now become the chief source of the expansion of wealth and productive activity because of their resources of pulpwood, water power, and mineral deposits.

The discovery of minerals in Canada was closely associated with the early exploration of the country. Iron and silver, and later coal, were reported in Nova Scotia by some of the first French adventurers. Bellin's maps published in 1744 indicated the existence of silver-lead not ten miles distant from the now famous Cobalt Silver Camp. However, in the early period of Eastern Canada's history such development of mineral resources as occurred was almost entirely incidental to the agricultural colonization of the country and consisted principally of the smelting of bog iron ores and of the production of such necessities as salt and building materials.

Though coal was discovered on Vancouver island in 1835, it was the alluvial deposits of the Fraser river and the gold rush to the Cariboo in 1859 that really opened up the interior of the mainland, so that, on the western coast, mineral exploitation preceded agricultural settlement.

These early isolated discoveries were followed by others, notably the gold ores of Nova Scotia, the copper-nickel of Sudbury, the silver of Silver islet on lake Superior, copper-gold at Rossland, and silver-lead in the Kootenays. A foundation for the mining industry was laid with the setting up of the Geological Survey of Canada under Sir William Logan and the publication in 1863 of the *Geology of Canada.* However, it was not until the mining development in British Columbia in the 1890's and the discovery of rich deposits of silver and gold in northern Ontario in the first decade of this century that the mining industry began to give promise of its tremendous possibilities. The effects of successive steps in the development of the mineral resources may be traced in the per capita figures of mineral production in Table **1**, p. 317. The first period of rapid increase from 1895 to 1900 resulted from the placer discoveries of Yukon and the expansion of lode mining in British Columbia. The next important increase in 1906-13 followed the discovery of silver and gold at Cobalt and Porcupine.

---

* The sections of this chapter, with the exception of Section 1, have been revised, as regards production figures, by W. H. Losee, B.Sc., Chief of the Mining, Metallurgical and Chemical Branch, Dominion Bureau of Statistics. A complete list of the publications of this Branch appears in Chapter XXIX, Section 1. Subsection 1 of Section 1 has been compiled from material supplied by the Lands, Parks and Forests Branch of the Department of Mines and Resources, Ottawa, and Subsection 2 of Section 1 from material furnished by the Provincial Governments.

War prices stimulated the production of base metals from properties already developed, but on the whole active prospecting was much curtailed during the War period. However, in the decade following the War, new discoveries were widespread and the expansion was very rapid. The aeroplane furnished a means of comparatively easy access to remote districts and the discovery of new deposits of minerals increased annually. Important discoveries of base metals were the copper-gold areas of Rouyn in western Quebec, and the copper-gold-zinc ore bodies near the Manitoba-Saskatchewan boundary. Expansion programs were carried out at nickel-copper properties in the Sudbury district of Ontario and silver-lead-zinc properties in British Columbia. New gold mines were brought to the production stage in western Quebec, northwestern Ontario, and eastern Manitoba. An intrepid prospector went farther afield and uncovered silver-radium ores at the easterly end of Great Bear lake.

It should not be imagined from the brief outline given above that the successful and profitable development of mining enterprise in Canada has depended solely upon the *discovery* of the ore bodies. Even in the case of occurrences of free-milling gold ores, a long and expensive process of exploration is required before the possibilities of a property as an economic producer can be determined, and, only a very small percentage of mining claims, though showing promising indications of mineralization when located, ever develop to profitable production. In the case of base-metal ore-bodies, not only is the expenditure for preliminary development necessary, but also difficult problems in metallurgy are presented, requiring long periods of research and experiment for their solution before profitable production is made possible. The nickel-copper deposits of Sudbury were discovered in 1883, but production on an important scale did not come until after 1900 and the greatest expansion has occurred since the War. The great Sullivan silver-lead-zinc deposit in the Kootenay district of British Columbia was discovered in 1892, but production upon anything like the present scale did not come until after the War, when a successful method of separating the lead and zinc had been worked out.

Statistics of Mines and Minerals.—The compilation and publication of statistics concerning mines and minerals in the Dominion is carried out by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, which works in close co-operation with the Mines Departments of the various Provincial Governments, collecting the data in collaboration with these Departments. Questionnaires sent to those engaged in mineral industries are designed to meet the requirements of both the Dominion and the provincial authorities, thus eliminating duplication of labour.

For more detailed information on the mineral production of Canada, the reader is referred to the various reports issued by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics. The more important of these are: annual preliminary reports on the mineral production of Canada; a complete, detailed, annual report on the mineral industries; monthly bulletins on the production of the 16 leading minerals; and monthly, quarterly, and annual reports on coal statistics. (See footnote to p. 309.)

The following material of this chapter is divided into six sections: (1) a sketch of the administration of mineral lands and mining laws; (2) a summary of general production; (3) the industrial statistics of the mineral industries; (4) production of metallic minerals; (5) production of non-metallic minerals; (6) production of clay products and structural materials.

Section 1.—Mineral Lands Administration and Mining Laws.

The mineral lands of Canada, like other Crown lands, are administered by either the Dominion or the Provincial Governments. The Dominion Government administers the mineral lands of Yukon and the Northwest Territories as well as those in all Indian Reserves, and in National Parks; all other mineral lands lying within the boundaries of the several provinces are administered by the respective Provincial Governments.

Subsection 1.—Dominion Mining Laws and Regulations.

Dominion lands to which these regulations apply are those administered by the Department of Mines and Resources, and lie within Yukon and the Northwest Territories. Titles issued for Dominion lands, the property of the Dominion Government, in the Territories of Canada reserve to the Crown the mines and minerals which may be found on or under such lands, together with the right of operation.

Placer.—Claims 500 feet long and from 1,000 to 2,000 feet wide, according to location, may be staked out and acquired by any person 18 years of age or over; claims to be marked by two legal posts, one at each end, and the line joining them marked. Creek claims are staked along the base line of the creek, and extend 1,000 feet on each side. River claims are 500 feet on one side of the river and extend back 1,000 feet. Other claims are staked parallel to the creek or river on which they front, 500 feet long by 1,000 feet. Expenditure in development of each claim to be incurred and proved each year, \$200 in Yukon and \$100 elsewhere. Royalty $2\frac{1}{2}$ p.c. under the Yukon Placer Mining Act.

Quartz.—"Mineral" under this heading means all deposits of metals and other useful minerals other than placer deposits, peat, coal, petroleum, natural gas, bitumen, and oil shales.

Under the present regulations, effective Apr. 2, 1932, applicable to the Northwest Territories, any prospector or locator of a mineral claim, whether an individual, mining partnership, or a company, must hold a miners licence, the fee being \$5 for an individual, from \$5 to \$20 for mining partnerships, and larger amounts proportionate to their capitalization for mining companies. A licensee may stake out 6 claims on his own licence and 12 more for 2 other licensees, not exceeding 18 in all in any one licence year in any mining division. A mineral claim shall be rectangular and marked by a post at each corner—maximum area 51·65 acres, being 1,500 feet square. Entry is granted by a mining recorder, fee \$5 for a claim located by a licensee on his own licence and $10 if located on behalf of another licensee. Grant is renewable from year to year, subject to representation work to the value of $100 being done on the location each year, and the renewal of the owner's miners licence. A maximum of 36 claims may be grouped for purposes of representation work. When prescribed representation work to the value of $500 has been done and confirmed, discovery of mineral in place shown to have been made, a survey made by a Dominion land surveyor at grantee's expense, and certain other requirements met, a lease is issued for a term of 21 years, renewable, the rental for the full term of a claim not exceeding 51·65 acres being $50. The cost of the survey, reckoned at $100, may be counted as work done on the claim. When the profits of a mine exceed $10,000 in any calendar year, there is a royalty of from 3 to 6 p.c. or higher, proportionate to profits. Miners licences are not required in Yukon under the Yukon Quartz Mining Act, but the general provisions of the Act are similar to those of the Quartz Mining Regulations above, except that the fee for a grant is $10 and only 8 mineral claims may be grouped for operation.

In addition to these Quartz and Placer Mining Regulations, applicable to the Northwest Territories, and the Yukon Quartz and Placer Mining Acts, the following regulations regarding minerals are in force: *Yukon.*—Dredging Regulations; Petroleum and Natural Gas Regulations. *Yukon and Northwest Territories.*—Alkali Mining Regulations; Carbon-Black Regulations; Coal Mining Regulations; Potash Regulations and Domestic Coal Permits. *Northwest Territories.*—Dredging Regulations; Oil and Gas Regulations; Quarrying Regulations and Permits to remove sand, stone, and gravel from beds of rivers.

Subsection 2.—Provincial Mining Laws and Regulations.

The granting of land in any province except Ontario no longer carries with it mining rights upon or under such land. In Ontario mineral rights are expressly reserved if they are not to be included. Some early grants in New Brunswick and Quebec also included certain mineral rights. Otherwise mining rights must be separately obtained by lease or grant from the provincial authority administering the mining laws and regulations. Mining activities may be classified as placer, general minerals (usually metallic ores), fuel (coal, petroleum, gas), and quarrying. Under these divisions of the mining industry provincial regulations may be summarized as follows:—

Placer.—In those provinces in which placer deposits occur there are regulations defining the size of placer holdings, the terms under which they may be acquired and held, and the royalties to be paid.

General Minerals.—These are sometimes described as quartz, lode minerals, or minerals in place. The most elaborate regulations apply in this division. In all provinces a prospectors or miners licence to search for mineral deposits, valid for a year, must be obtained. A claim of promising-looking ground of a specified size may then be staked. This claim must be recorded within a time limit, with the payment of recording fees. Work to a specified value per annum must be performed upon the claim for a period up to five years, when a grant or lease of the mining rights may be obtained subject to fees or annual rental. The taxation most frequently applied is a percentage of net profits of producing mines.

Fuels.—In those provinces in which coal occurs, the size of holdings is laid down and the conditions regarding work and rental under which they may be held.

In some cases royalties are provided for. In the cases of petroleum and natural gas, a boring permit on likely ground is usually first obtained. If oil or gas is discovered, the operator may obtain the lease or grant of a limited area subject to rental or fees. A royalty on production is sometimes payable.

Quarrying.—Regulations under this heading define the size of holding and the terms of lease or grant.

The more important features of the regulations dealing with these divisions of the mining industry are outlined for each of the provinces below.

Nova Scotia.—*Administration.*—Minister of Public Works and Mines, Parliament Buildings, Halifax. *Legislation.*—Mines Act (c. 22, R.S.N.S. 1923) and amending Acts of 1927 (c. 17), 1929 (c. 22), 1933 (c. 12), 1935 (c. 23), 1936 (c. 46), 1937 (c. 19), and 1938 (c. 48).

General Minerals.—Prospectors licence at nominal fee. Lease of mining rights—40 years for gold and silver; 20 years, three times renewable, for other minerals; both subject to annual rental and performance of work.

Coal.—Royalty—12½ cents per long ton, with exemption of coal used in mining operations and for domestic purposes by workmen employed about the mine.

Quarrying.—Rights to limestone, gypsum, and building materials are acquired with ordinary land title.

New Brunswick.—*Administration.*—Department of Lands and Mines, Fredericton. *Legislation.*—Mining Act (c. 35, R.S.N.B. 1927), as amended by c. 27, 1927, and c. 23, 1933. In most grants of Crown land since about 1805, all mines and minerals are reserved to the Crown. Prior to that time, most of the land grants reserved only gold, silver, copper, lead, and coal.

General Minerals.—Prospectors licence, terminating Dec. 31, costs $10. *Claims.*—A prospector may stake 10 claims of 40 acres each which must be registered within 30 days and 25 days' work done in each claim within the year. All this work may be concentrated on one of a group of claims. Mining rights are granted by mining licence, renewable annually, upon payment of $10 per claim. When the mine produces on a commercial basis, a 20-year lease under similar conditions may issue.

Fuel.—Royalties are 10 cents per long ton on coal and 5 p.c. on the value at the well's mouth for petroleum and natural gas.

Quebec.—*Administration.*—Minister of Mines, Quebec. Information and statistics on mining operations and geological explorations are to be found in the Annual Report of the Quebec Bureau of Mines. *Legislation.*—Quebec Mining Act (c. 80, R.S.Q. 1925) and amendments. In townships the Crown retains full mining rights on lands patented subsequently to July 24, 1880, and gold and silver rights on lands patented previously to that date. All mining rights belong to the Crown in most of the seigneuries.

General Minerals.—Miners certificate good for calendar year; fee $10. *Claims.*—Five claims of 40 acres each must be recorded and 25 days' work per claim done within 12 months; a development licence renewable annually is granted upon payment of $10 recording fee and 50 cents per acre. Mining rights can be purchased as a mining concession for $5 per acre for superior minerals and $3 per acre for inferior minerals. Operators must make annual returns to the Minister. Taxes are payable on annual profits at rates graduated from 4 p.c. upward.

Ontario.—*Administration.*—Department of Mines, Parliament Buildings, Toronto. A resident mining recorder is appointed for each mining division. *Legislation.*—Mining Act (c. 45, R.S.O. 1927), with amendments; applies to all Crown lands except Indian lands. Title is a grant in fee simple, except in provincial forests where mining lands are leased. There is no apex law, all claim boundaries extending vertically downwards. Disputes are settled by the recorder, or on appeal, by the Judge of the Mining Court of Ontario.

General Minerals.—Annual miners licence—fee $5 for an individual; $100 on each $1,000,000 capital for companies; holder permitted to stake 3 claims in any and every mining division for himself and 6 additional for other licence holders, but not more than 3 for any individual licensee. *Claims.*—In unsurveyed territory 20 chains square (40 acres) with lines N.-S. and E.-W. astronomically; in surveyed territory an eighth, a quarter, or a half lot, *i.e.*, up to 50 acres. Representation work consists of the actual performance of at least 200 days' work within 5 years. *Taxation.*—Five cents per acre per annum on patented and leased mining lands with an area of 10 acres or over in unorganized territory; on net profits, with $10,000 exempt, 3 p.c. up to $1,000,000, 5 p.c. from $1,000,000 to $5,000,000, and 6 p.c. on the excess above $5,000,000.

Fuels.—Petroleum, natural gas, coal, and salt on the James Bay slope may be searched for under authority of a boring permit. A total of 1,920 acres may be taken up by an individual in blocks of 640 acres. Certain areas have been withdrawn from staking.

Manitoba.—*Administration.*—Director, Mines Branch, Department of Mines and Natural Resources, Winnipeg; mining recorders' offices at Winnipeg and The Pas. *Legislation.*—The Mines Act (c. 27, 1930; c. 28, 1932; c. 25, 1933; c. 27, 1934; c. 26, 1937-38) and regulations thereunder; the Mining Tax Act (c. 27, 1933; c. 44, 1937); and the Well Drilling Act (c. 50, 1937).

General Minerals.—The regulations follow closely those summarized for Dominion lands in Subsection 1, except that: not more than 3 claims may be staked for any one licensee, and not more than 9 altogether by one person in any year in any mining division; representation work required is 25 days' work per year for 5 years, for which purpose 9 claims may be grouped.

Fuels.—A prospecting permit, good for one year, is necessary to search for oil, coal, gas, or salt. If mineral is discovered a 21-year lease, subject to annual rental and certain work, is granted.

Quarrying.—Lands up to 40 acres containing building stone, clay, gravel, gypsum, or sand may be leased as a quarrying location at an annual rental.

Saskatchewan.—*Administration.*—Department of Natural Resources, Regina. *Legislation.*—Mineral Resources Act of 1931 and regulations thereunder; Saskatchewan Mines Act, providing for the competency of mine managers and pit bosses, for the reporting of accidents, and the welfare and safety of those employed in the production of minerals; Coal Mining Industry Act, 1935, providing for a Coal Administrator to administer all legislation pertaining to the coal industry.

General Minerals.—The regulations follow closely those outlined for Dominion lands in Subsection 1, except that the holder of a miners licence may stake not more than 3 claims for himself and 3 for each of 2 other licensees, while not more than 9 claims may be grouped for representation work.

Coal.—Three locations may be applied for by mail or in person; the size of a location may be from 40 acres to 640 acres, but the length must not exceed three times the breadth. All operators must be licensed by the Coal Administrator, the licence being contingent upon payment of fair wages, workmen's compensation assessments, rentals and royalties to the Crown, and certain other conditions. Operators must mine annually 5 tons per acre, on leases issued since Jan. 1, 1936.

Petroleum and Natural Gas.—Locations may be applied for by mail or in person. The area of a location may be from 40 acres to 19,200 acres, and one person may apply for 3 locations, but not over 19,200 acres in all, except in unsurveyed lands, in which the limit is 1,920 acres. An operator must obtain a permit and furnish a substantial bond. All drillers must secure licences of competency. The record of a driller may be obtained by payment of a fee.

Alberta.—*Administration.*—Department of Lands and Mines, Edmonton. There is a staff of inspectors of mines. *Legislation.*—The Provincial Lands Act, 1931; the Oil and Gas Wells Act, 1931; the Oil and Gas Resources Conservation Act, 1938; the Coal Mines Regulations Act; the Coal Sales Act; and the Coal Miners Wage Security Act.

The fuels—coal, natural gas, and petroleum—constitute the most important mineral resources of Alberta.

Coal.—All coal rights are disposed of under terminable leases at an annual rental of $1 per acre and subject to a royalty of 5 cts. per short ton on production. The minimum area is 40 acres and the maximum 640. New leases are granted only for the continuation of existing operations or in the few instances for purely local needs if the locality cannot be economically supplied by existing mines. The Chief Inspector of Mines with a staff of mine inspectors administers the regulations for the safe operation of all mines, sets examinations, approves and issues certificates of competency to operating officials, requires all companies to register their trade name and sell coal under their registered name, and also requires all coal operators to provide bond to insure payment of wages.

Petroleum and Natural Gas.—Areas of from 10,000 to 50,000 acres in a block may be placed under reservation for geological exploration for 45 days for a fee of 5 cts. per acre. If monthly reports prove that the work is being diligently carried on, extensions up to a total of six months may be granted. Provided the work has been satisfactorily completed and all geological reports filed, leases may be applied for. The applicant may be granted a credit to be applied on lease rentals of part of the expenditure in excess of 20 cts. per acre.

Applications for leases must be made in person. The minimum area is 160 acres and the maximum 1,920. Leases are issued for a period of 21 years, renewable for a further 21 years, at a rental of $1 an acre per year, and a royalty of 10 p.c. on the product of the location.

The drilling and production operations, and the production from oil and gas wells is controlled by the Petroleum and Natural Gas Conservation Board under very complete regulations based on sound engineering practice and waste prevention. Drilling sites must be approved. In producing oil fields the Board issues monthly orders giving the production allowable for each well, based on bottom hole pressure, gas-oil ratio, acreage, and rate of flow. The Board may levy a tax on petroleum property to cover administration costs.

British Columbia.—*Administration.*—Department of Mines, Victoria. The Department includes all Government offices in connection with the mining industry. *Legislation.*—The Department of Mines Act and other Acts respecting mining and minerals, notably: the Mineral Act (c. 181, R.S.B.C. 1936); the Placer-Mining Act (c. 184, R.S.B.C. 1936); Metalliferous Mines Regulation Act (c. 189, R.S.B.C. 1936); the Coal-Mines Regulation Act (c. 188, R.S.B.C. 1936); and amendments to the above Acts.

Placer.—Claims are of three classes: (1) creek diggings—250 feet long and 1,000 feet wide, 500 feet on each side of the stream; (2) bar diggings—250 feet square on a bar covered at high water, or a strip 250 feet long at high water, extending between high-water mark and extreme low-water mark; (3) dry diggings over which water never extends—250 feet square. A placer claim must be worked by the owner, or someone on his behalf continuously during working hours. Discontinuance for 7 days, except in close season, lay-over, leave of absence, sickness or other reason satisfactory to the Gold Commissioner, is deemed abandonment. To hold a placer claim more than one year, it must be again recorded before the expiration of the year.

Placer leases of unoccupied Crown lands, approximately 80 acres in extent, may be granted by the Gold Commissioner of the district, the annual rental for such a lease being $30 and the annual expenditure required in development work $250. Provision is also made for the granting of special leases of areas in excess of that referred to above.

General Minerals.—The terms of the mining laws are favourable to the prospector and operator, fees and rentals being small. Prospectors licence or "free miners certificate"—applicant must be over the age of 18; fee for individual $5 per annum; for a joint-stock company $50 or $100 per annum depending on capitalization. Mineral claims must not exceed 1,500 feet square (51·65 acres); work, amounting to $500, which may be spread over 5 years, required to obtain a Crown grant, while surface rights are obtainable at a figure in no case exceeding $5 per acre.

Section 2.—Summary of General Production.

Historical and current statistics of mineral production in Canada as a whole are presented in Subsection 1, while production by provinces is dealt with in Subsection 2.

For the proper understanding of the importance of mineral production as compared with other primary industries in Canada, the reader is referred to Chapter VII, beginning on p. 175, while its part in the external trade of Canada is dealt with in Chapter XVI, especially Subsections 3 and 7.

Subsection 1.—General Statistics of Mineral Production.

Historical Statistics.—Definite records of the annual value of mineral production go back only to 1886, as given in Table 1, although actual production began with the earliest settlements. The figures given are not strictly comparable throughout the whole period, minor changes having been adopted in methods of computing both the metallic content of ores sold and the valuations of the products. Earlier methods resulted in a somewhat higher value than those now in use would have shown. However, the changes do not interfere with the general usefulness of the figures in showing the broad trends of the mineral industry.

1.—Value of Mineral Production in Canada, calendar years 1886-1938.

Calendar Year.	Total Value.	Value per Capita.	Calendar Year.	Total Value.	Value per Capita.	Calendar Year.	Total Value.	Value per Capita.
	$	$		$	$		$	$
1886	10,221,255	2·23	1904	60,082,771	10·31	1922	184,297,242	20·66
1887	10,321,331	2·23	1905	69,078,999	11·51	1923	214,079,331	23·76
1888	12,518,894	2·67	1906	79,286,697	12·86	1924	209,583,406	22·92
1889	14,013,113	2·96	1907	86,865,202	13·55	1925	226,583,333	24·38
1890	16,763,353	3·51	1908	85,557,101	12·92	1926	240,437,123	25·44
1891	18,976,616	3·93	1909	91,831,441	13·50	1927	247,356,695	25·67
1892	16,623,415	3·40	1910	106,823,623	15·29	1928	274,989,487	27·96
1893	20,035,082	4·06	1911	103,220,994	14·32	1929	310,850,246	31·00
1894	19,931,158	4·00	1912	135,048,296	18·28	1930	279,873,578	27·42
1895	20,505,917	4·08	1913	145,634,812	19·08			
1896	22,474,256	4·42	1914	128,863,075	16·36	1931[1]	230,434,726	22·21
1897	28,485,023	5·56	1915	137,109,171	17·18	1932	191,228,225	18·20
1898	38,412,431	7·42	1916	177,201,534	22·15	1933	221,495,253	20·74
1899	49,234,005	9·41	1917	189,646,821	23·53	1934	278,161,590	25·67
1900	64,420,877	12·15	1918	211,301,897	25·93	1935	312,344,457	28·56
1901	65,797,911	12·25	1919	176,686,390	21·26	1936	361,919,372	32·82
1902	63,231,836	11·51	1920	227,859,665	26·63	1937	457,359,092	41·12
1903	61,740,513	10·90	1921	171,923,342	19·56	1938[2]	444,824,222	39·68

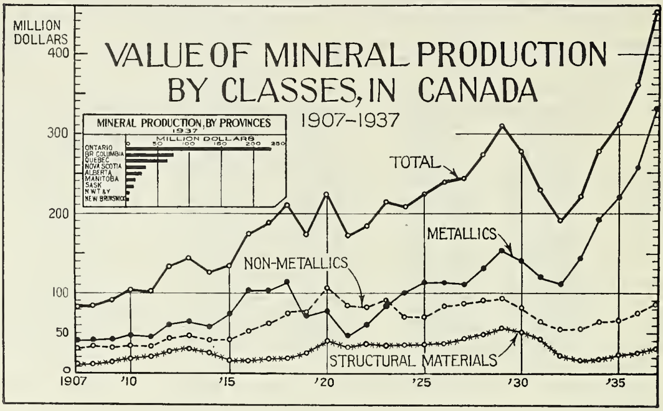
[1] Beginning with 1931 exchange equalization on gold production is included. [2] Figures for 1938 are subject to revision.

Current Production.—The trend in the development of the mineral resources of Canada was affected by the incidence of the depression for several years after 1929. The decline in the prices of base metals materially reduced the prospecting for, and development of, new deposits of these metals, but the higher price of gold after 1932 greatly stimulated the development of auriferous deposits. Prospecting for gold ores and the exploration and development of known auriferous deposits have been more extensively carried on throughout Canada since 1932 than ever before. These activities have been common to both the older producing camps and new areas. In certain of the older camps properties closed prior to the revaluation of gold were reopened and placed in production or further explored as to their economic possibilities. In some of the producing mines the higher price for the metal permitted a very considerable extension or increase of pay ore with the resultant milling of rock of lower gold content and important increases in ore reserves.

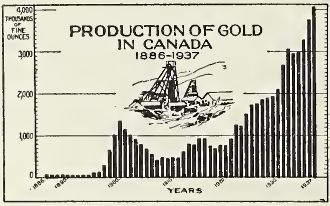
The economic recovery since 1932 and the rising trend in base-metal prices have resulted in a rapid increase in production from deposits which were already known and partly developed before 1929; this expansion has occurred in spite of the fact that base-metal prices have not yet reached the level relative to gold which existed prior to 1929. The metals, copper, lead, and zinc were produced in greater quantities in 1938 than ever before in Canada in spite of a decline in prices as compared with the previous year. Prospecting for new base-metal deposits was not particularly active, but on some producing properties, developments disclosed valuable new ore bodies.

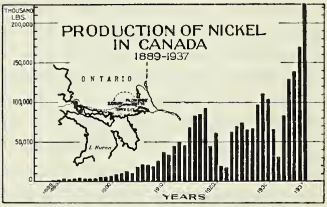
Production of various non-metallic minerals, especially asbestos and coal, have realized important gains since 1932. The gains in the structural materials industries, where recessions were severe during the period of business depression, have been encouraging since 1933, but there is room for a large expansion in this division when the construction industry recovers its normal activity.

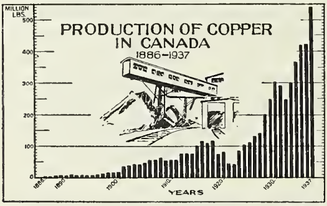
In 1937, the latest year for which comprehensive world figures of the Imperial Institute are available, Canada stood first in the production of asbestos, nickel, the platinum metals, and radium; third in zinc and silver; and fourth in gold, copper, and lead. During that year, Canada produced approximately 89 p.c. of the world production of nickel, 58 p.c. of the asbestos, 10 p.c. of the copper, 12 p.c. of the gold, 11 p.c. of the lead, 10 p.c. of the zinc, and 8·5 p.c. of the silver.

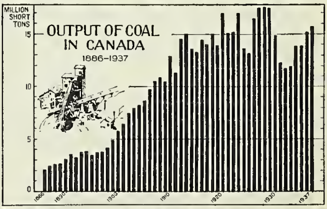


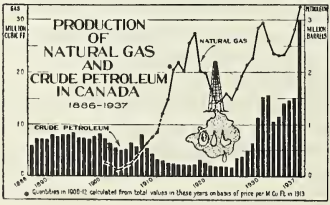
QUANTITY PRODUCTION OF THREE LEADING METALLIC AND THREE NON-METALLIC MINERALS

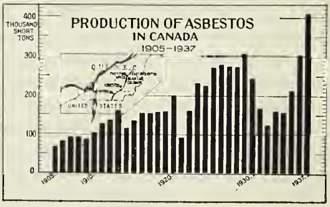












The Preliminary Report on the Mineral Production of Canada, released by the Dominion Bureau of Statistics in March, 1939, shows a total valuation of $444,824,222 for the mineral output of the Dominion in 1938 compared with $457,359,092 in 1937. This represents a decrease of 2·7 p.c. from 1937 and reflects the recession in world trade and industrial conditions which existed in 1938.

2.—Mineral Production of Canada, calendar years 1935-37.

Mineral.	1935.		1936.		1937.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Metallics.		$		$		$
Antimony[1] lb.	Nil	-	Nil	-	48,163	7,394
Arsenic (As_2O_3) “	2,558,789	75,326	1,365,606	42,491	1,389,426	41,032
Bismuth “	13,797	13,245	364,165	360,523	5,711	5,654
Cadmium “	580,530	441,203	785,916	699,465	745,207	1,222,140
Chromite	[2]	14,947	[2]	13,578	[2]	43,250
Cobalt lb.	681,419	512,705	887,591	804,676	507,064	848,145
Copper “	418,997,700	32,311,960	421,027,732	39,514,101	530,028,615	68,917,219
Gold fine oz.	3,284,890	115,595,279[3]	3,748,028	131,293,421[3]	4,096,213	143,326,493[3]
Lead lb.	339,105,079	10,624,772	383,180,909	14,993,869	411,999,484	21,055,173
Manganese ore ton	100	800	221	1,596	85	817
Molybdenite[1] “	Nil	-	Nil	-	8	8,147
Nickel lb.	138,516,240	35,345,103	169,739,393	43,876,525	224,905,046	59,507,176
Palladium, rhodium, iridium, etc. fine oz.	84,772	1,962,937	103,671	2,483,075	119,829	3,179,782
Platinum “	105,374	3,445,730	131,571	5,320,731	139,377	6,752,816
Radium	[4]	[4]	[4]	[4]	[4]	[4]
Selenium lb.	366,425	703,536	350,857	621,017	397,227	687,203
Silver fine oz.	16,618,558	10,767,148	18,334,487	8,273,804	22,977,751	10,312,644
Tellurium lb.	16,425	32,850	35,591	62,997	41,490	71,777
Titanium ore ton	2,288	16,400	2,566	18,318	4,229	26,432
Zinc lb.	320,649,859	9,936,908	333,182,736	11,045,007	370,337,589	18,153,949
Totals, Metallic Minerals	-	**221,800,849**	-	**259,425,194**	-	**334,165,243**
Non-Metallics.						
FUELS.						
Coal ton	13,888,006	41,963,110	15,229,182	45,791,934	15,835,954	48,752,048
Natural gas M cu. ft.	24,910,786	9,363,141	28,113,348	10,762,243	32,380,991	11,674,802
Peat ton	1,340	5,761	1,341	7,376	478	2,676
Petroleum, crude bbl.	1,446,620	3,492,188	1,500,374	3,421,767	2,943,750	5,399,353
TOTALS, FUELS	-	54,824,200	-	59,983,320	-	65,828,879
OTHER NON-METALLIC MINERALS.						
Asbestos ton	210,467	7,054,614	301,287	9,958,183	410,026	14,505,791
Bituminous sands “	40	160	Nil	-	35	142
Diatomite “	823	33,140	615	13,650	643	18,606
Feldspar “	17,742	144,330	17,846	154,475	21,346	178,222
Fluorspar “	75	900	75	900	150	2,550
Graphite	[2]	79,781	[2]	88,812	[2]	125,343
Grindstones (incl. pulpstones) ton	708	34,010	569	24,724	412	21,429
Gypsum “	541,864	932,203	833,822	1,278,971	1,047,187	1,540,483
Iron oxides (ochre) “	5,516	77,075	5,854	69,630	6,197	83,640
Lithium minerals	Nil	-	Nil	-	[2]	1,694
Magnesitic dolomite	[2]	486,084	[2]	768,742	[2]	677,207
Magnesium sulphate ton	340	7,965	654	13,712	727	14,456
Mica lb.	1,255,616	82,038	1,601,557	74,556	1,890,376	133,731
Mineral water imp. gal.	146,516	16,590	154,286	18,516	225,019	20,586
Nepheline-syenite	Nil	-	[2]	37,426	[2]	121,481
Phosphate ton	186	1,103	525	4,927	100	900
Quartz “	233,002	424,882	1,046,649	597,781	1,377,448	1,129,011
Salt “	360,343	1,880,978	391,316	1,773,144	458,957	1,799,465
Silica brick M	2,461	96,194	2,393	97,285	3,744	181,126
Soapstone	[2]	32,053	[2]	32,770	[2]	40,513
Sodium carbonate ton	242	2,430	192	1,677	286	2,574
Sodium sulphate “	44,817	343,764	75,598	552,681	79,884	618,028
Sulphur[5] “	67,446	634,235	122,132	1,033,055	130,913	1,154,992
Talc “	13,803	139.479	14,508	144,500	12,457	123.301
TOTALS, OTHER NON-METALLIC MINERALS	-	12.504.008	-	16,740,117	-	22,495,271
Totals, Non-Metallic Minerals	-	**67,328,208**	-	**76,723,437**	-	**88,324,150**

---

[1] Contained in concentrates exported. [2] Not available. [3] Value in Canadian funds. [4] Not available for publication. [5] Sulphur content of pyrites shipped and estimated sulphur contained in the sulphuric acid made from smelter gases.

2.—Mineral Production of Canada, calendar years 1935-37—concluded.

Mineral.	1935.		1936.		1937.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
		$		$		$
Clay Products and Other Structural Materials.						
CLAY PRODUCTS.						
Brick—						
Soft Mud Process—						
Face............. M	6,995	122,215	6,097	111,378	9,904	175,544
Common......... M	21,197	259,504	24,180	302,690	23,636	316,534
Stiff Mud Process (wire cut)—						
Face............. M	25,289	500,066	30,218	575,765	37,610	735,615
Common......... M	32,334	437,123	35,592	484,078	55,689	755,630
Dry Press—						
Face............. M	8,454	175,042	8,961	165,924	12,565	233,542
Common......... M	6,381	55,253	10,241	100,785	14,136	152,662
Fancy or ornamental brick............. M	13	728	25	1,374	55	2,972
Sewer brick........ M	175	5,236	418	6,778	175	2,777
Paving brick....... M	15	627	116	3,149	3	131
Firebrick........... M	1,817	90,149	2,548	118,923	2,950	142,827
Fireclay and other clay ton	2,272	15,574	2,437	17,639	8,165	31,068
Kaolin................. "	170	1,520	Nil	-	Nil	-
Fireclay blocks and shapes..	[1]	71,344	[1]	65,171	[1]	75,431
Hollow blocks........ ton	47,195	344,608	58,501	467,860	64,526	533,843
Roofing tile........... No.	82,015	3,669	52,730	2,139	60,542	3,302
Floor tile (quarries)..sq. ft.	51,765	7,629	97,738	13,798	73,191	12,169
Ceramic tile...............	[1]	615	Nil	-	Nil	-
Drain tile............ M	7,124	205,336	8,148	214,590	11,391	298,970
Sewer pipe, copings, flue linings, etc..................	[1]	481,559	[1]	588,485	[1]	790,210
Pottery, glazed or unglazed.	[1]	220,711	[1]	218,402	[1]	232,209
Bentonite............ ton	41	781	120	180	163	1,971
Other clay products.........	[1]	13,274	[1]	11,919	[1]	19,452
TOTALS, CLAY PRODUCTS.	-	3,012,563	-	3,471,027	-	4,516,859
OTHER STRUCTURAL MATERIALS.						
Cement.............. bbl.	3,648,086	5,580,043	4,508,718	6,908,192	6,168,971	9,095,867
Lime................. ton	405,419	2,925,791	468,401	3,335,970	549,353	3,824,917
Sand and gravel...... "	21,213,489	6,389,440	22,124,160	6,921,399	27,001,301	10,492,696
Slate................ "	1,129	4,329	1,247	5,414	900	5,519
Stone—						
Granite............ "	326,354	1,126,287	941,743	1.319,313	1,135,099	1,827,433
Limestone.......... "	3,631,665	3,253,573	3,731,548	3,143,872	5,542,806	4,673,942
Marble............. "	15,975	85,369	22,866	169,698	21,642	88,595
Sandstone.......... "	342,824	838,005	285,508	495,856	235,165	343,871
TOTALS, OTHER STRUCTURAL MATERIALS..............	-	20,202,837	-	22,299,714	-	30,352,840
Totals, Clay Products and Other Structural Materials.....................	-	**23,215,400**	-	**25,770,741**	-	**34,869,699**
Grand Totals (Canadian Funds).................	-	**312,344,457**	-	**361,919,372**	-	**457,359,092**

[1] Not available.

Analysis of Current Value and Volume.—In order to interpret more clearly and simply the trends in mineral production in Canada over the period since 1929, the table that formerly appeared here and showed the fluctuations due to changes in price or volume for the two latest years only, has been replaced in this edition by Table 3, showing the percentage of the total value contributed by each principal mineral in each year, and also showing indexes of volume for the period.

Although the year 1929 was an abnormal rather than a normal year in most economic senses, mineral production in Canada was developing and changing so rapidly up to that point, that the adoption of an earlier year as the base year would tend to distort the picture in the case of numerous minerals. Furthermore, the primary purpose is to show the changes and trends which have resulted under the circumstances arising since 1929. Therefore that year is used as a base for the indexes of volume.

Values upon which percentages in this table are based are the annual values of mineral production expressed in Canadian currency as published.

Indexes of volume for individual items are calculated directly from quantities reported as produced in each year. Indexes for groups and grand totals are calculated by applying the percentage change in value due to variation in quantity in each year as compared with the previous year to the cumulative percentage the said previous year represented of the base year.

The part of the table showing the percentage which the value of each mineral bears to the total production in each year, indicates the rise in the relative importance of the metals and the decline in fuels and especially in clay products and other structural materials. The rise in metals has been relatively greatest in gold, nickel, copper, and the platinum metals, although gold did not form so large a proportion of the total in 1937 as in 1933. The production of coal was a lower percentage of the total in 1937 than in any other year, but the percentage of structural materials rose slightly in 1937 from the low point of 1936.

The volume of mineral production reached its lowest point of the depression in 1932, as this year marked the low point for the principal groups. For structural materials, however, the low point came in 1933. The volume of nickel production declined more than that of any other important metal in the depression, but the price remained comparatively stable. Clay products declined to a lower point than any other important mineral and the volume of all structural materials was still relatively low in 1937.

3.—Percentages of the Total Value of Mineral Production, and Indexes of Volume, by Groups and Principal Minerals, 1929-37.

Mineral.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Percentages of Total Value.									
METALLICS.									
Cobalt	0·6	0·4	0·3	0·3	0·3	0·2	0·2	0·2	0·2
Copper	14·0	13·6	10·6	8·0	9·8	9·6	10·3	10·9	15·1
Gold	12·8	15·5	24·4	37·4	38·0	36·9	37·0	36·3	31·3
Lead	5·3	4·7	3·2	2·8	2·9	3·0	3·4	4·1	4·6
Nickel	8·7	8·7	6·7	3·8	9·1	11·6	11·3	12·1	13·0
Platinum metals	0·5	0·9	1·2	1·0	0·7	2·2	1·7	2·2	2·2
Silver	3·9	3·6	2·7	3·0	2·6	2·8	3·4	2·3	2·3
Zinc	3·4	3·4	2·7	2·2	2·9	3·3	3·2	3·1	4·0
TOTALS, METALLICS[1]	49·6	51·0	52·0	58·6	66·4	69·7	71·0	71·7	73·1
FUELS.									
Coal	20·3	18·9	18·1	19·4	16·3	15·1	13·4	12·7	10·7
Natural gas	3·2	3·7	4·0	4·7	3·9	3·2	3·0	3·0	2·5
Petroleum	1·2	1·8	1·8	1·6	1·4	1·2	1·1	0·9	1·2
TOTALS, FUELS[1]	24·7	24·4	23·9	25·7	21·6	19·5	17·5	16·6	14·4
NON-METALLICS.									
Asbestos	4·2	3·0	2·1	1·6	2·4	1·8	2·3	2·8	3·2
Gypsum	1·1	1·0	0·9	0·6	0·3	0·3	0·3	0·4	0·3
Salt	0·5	0·6	0·8	1·0	0·9	0·7	0·6	0·5	0·4
Sulphur	0·1	0·1	0·2	0·2	0·2	0·2	0·2	0·3	0·3
TOTALS, NON-METALLICS[1]	6·8	5·4	4·8	4·0	4·5	3·8	4·0	4·6	4·9

---

[1] Totals include minor items not specified.

3.—Percentages of the Total Value of Mineral Production, and Indexes of Volume, by Groups and Principal Minerals, 1929-37—concluded.

Mineral.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Percentages of Total Value—concluded.									
Clay Products.									
Totals, Clay Products	4·5	3·8	3·4	1·9	1·0	1·0	1·0	1·0	1·0
Other Structural Materials.									
Cement	6·2	6·3	6·9	3·6	2·0	2·0	1·8	1·9	2·0
Lime	1·9	1·4	1·2	1·3	1·1	1·0	0·9	0·9	0·8
Sand and gravel	2·4	3·0	2·9	2·3	2·0	1·5	2·1	1·9	2·3
Stone	3·9	4·7	4·9	2·6	1·4	1·5	1·7	1·4	1·5
Totals, Other Structural Materials	14·4	15·4	15·9	9·8	6·5	6·0	6·5	6·1	6·6
Grand Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
Indexes of Volume (1929=100).									
Metallics.									
Cobalt	100·0	74·7	56·0	52·8	50·2	64·0	73·3	95·5	54·6
Copper	100·0	122·3	117·8	99·8	121·0	147·0	169·0	169·8	213·7
Gold	100·0	109·0	139·8	158·0	153·0	154·2	170·3	194·5	212·5
Lead	100·0	102·0	81·9	78·4	81·6	106·1	103·8	117·4	126·2
Nickel	100·0	94·1	59·6	27·5	75·5	116·7	125·6	154·0	204·0
Platinum metals	100·0	228·2	307·0	217·8	187·0	671·0	637·5	788·5	868·5
Silver	100·0	114·3	88·8	79·3	65·6	70·9	71·8	79·2	99·3
Zinc	100·0	135·7	120·3	87·4	100·9	151·3	164·6	168·9	187·6
Totals, Metallics[1]	100·0	111·8	108·8	100·9	112·9	133·3	145·3	165·2	189·8
Fuels.									
Coal	100·0	85·0	70·0	67·1	68·0	78·9	79·4	87·0	90·5
Natural gas	100·0	103·5	91·2	82·5	81·5	81·6	87·8	99·1	114·1
Petroleum	100·0	136·2	138·1	93·5	102·5	126·3	129·5	134·3	263·7
Totals, Fuels[1]	100·0	89·9	76·0	70·5	71·5	81·2	82·6	90·9	101·1
Non-Metallics.									
Asbestos	100·0	79·1	53·7	40·2	51·8	51·0	68·8	98·4	134·0
Gypsum	100·0	88·4	71·3	36·2	31·6	38·0	44·7	68·8	86·4
Salt	100·0	82·3	78·4	79·8	84·8	97·5	109·1	118·5	139·0
Sulphur	100·0	88·2	117·1	124·3	134·1	120·4	157·6	285·3	306·0
Totals, Non-Metallics[1]	100·0	81·2	62·9	47·4	56·0	61·1	73·4	110·2	140·7
Clay Products.									
Totals, Clay Products	100·0	77·9	56·6	27·4	19·0	22·0	24·4	28·7	36·9
Other Structural Materials.									
Cement	100·0	89·8	82·7	36·6	24·5	30·8	29·7	36·7	50·2
Lime	100·0	72·8	51·2	47·6	48·0	54·6	60·2	69·5	81·5
Sand and gravel	100·0	102·5	78·1	52·0	42·2	53·3	76·2	79·4	97·0
Stone	100·0	103·8	87·3	48·7	30·6	42·4	44·9	51·8	72·1
Totals, Other Structural Materials	100·0	93·5	79·0	44·0	32·4	40·4	45·4	51·7	65·8
Grand Totals	**100·0**	**100·2**	**90·4**	**76·3**	**80·1**	**93·7**	**101·4**	**116·2**	**134·5**

[1] Totals include minor items not specified.

Subsection 2.—Provincial Distribution of Mineral Production.

The principal mineral-producing province of Canada in recent years has been Ontario, which accounted for 50·3 p.c. of the Dominion total in 1937. The rise in the price of gold has been especially favourable to Ontario's mineral production, while the Sudbury nickel-copper deposits are another outstanding feature in the mineral resources of the province. British Columbia holds second place in the value of minerals produced with 15·1 p.c. of the Dominion totals in 1937. The mineral resources of British Columbia are probably more varied than those of any other province, since its production includes most of the important metals as well as substantial quantities of coal. Mineral production in Quebec has increased greatly in the post-war period, accounting for 14·2 p.c. of the total for Canada in 1937. Whereas formerly non-metallics (especially asbestos) and structural materials made up nearly all of its mineral production, more than half the value is now made up of metals, particularly gold and copper. Nova Scotia and Alberta are the most important coal-producing provinces. Manitoba and Saskatchewan, in recent years, have been making a growing contribution to the production of gold, copper, and zinc in the Dominion. The total value of mineral production in each of the provinces for each year since 1911 is given in Table **4**.

4.—Mineral Production of Canada, by Provinces, calendar years 1911-38.

NOTE.—Figures for the years 1899-1910, inclusive, will be found at p. 345 of the 1933 Year Book.

Calendar Year.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.[1]
	$	$	$	$	$	$	$	$	$
1911...	15,409,397	612,830	9,304,717	42,796,162	1,791,772	636,706	6,662,673	21,299,305	4,707,432
1912...	18,922,236	771,004	11,656,998	51,985,876	2,463,074	1,165,642	12,073,589	30,076,635	5,933,242
1913...	19,376,183	1,102,613	13,475,534	59,167,749	2,214,496	881,142	15,054,046	28,086,312	6,276,737
1914...	17,584,639	1,014,570	11,836,929	53,034,677	2,413,489	712,313	12,684,234	24,164,039	5,418,185
1915...	18,088,342	903,467	11,619,275	61,071,287	1,318,387	451,933	9,909,347	28,689,425	5,057,708
1916...	20,042,262	1,118,187	14,406,598	80,461,323	1,823,576	590,473	13,297,543	39,969,962	5,491,610
1917...	21,104,542	1,435,024	17,400,077	89,066,600	2,628,264	860,651	16,527,535	36,141,926	4,482,202
1918...	22,317,108	2,144,017	19,605,347	94,694,093	3,120,600	1,019,781	23,109,987	42,935,333	2,355,631
1919...	23,445,215	1,770,945	21,267,947	67,917,998	2,868,378	1,521,964	21,087,582	34,865,427	1,940,934
1920...	34,130,017	2,491,787	28,886,214	81,715,808	4,223,461	1,837,468	33,586,456	39,411,728	1,576,726
1921...	28,912,111	1,901,505	15,157,094	57,356,651	1,934,117	1,114,220	30,562,229	33,230,460	1,754,955
1922...	25,923,499	2,263,692	17,646,529	65,866,029	2,258,942	1,255,470	27,872,136	39,423,962	1,785,573
1923...	29,648,893	2,462,457	20,308,763	80,825,851	1,768,037	1,047,583	31,287,536	43,757,388	2,972,823
1924...	23,820,352	1.969,260	19,136,504	86,398,656	1,534,249	1,128,100	22,344,940	52,298,533	952,812
1925...	17,625,612	1,743,858	24,284,527	87,980,436	2,276,759	1,076,392	25,318,866	64,485,242	1,791,641
1926...	28,873,792	1,811,104	25,956,193	84,702,296	3,073,528	1,193,394	26,977,027	65,622,976	2,226,813
1927...	30,111,221	2,148,535	28,870,403	89,982,962	2,888,912	1,455,225	29,309,223	60,801,170	1,789,044
1928...	30,524,392	2,198,919	37,037,420	99,584,718	4,186,853	1,719,461	32,531,416	64,496,351	2,709,957
1929...	30,904,453	2,439,072	46,358,285	117,662,505	5,423,825	2,253,506	34,739,986	68,162,878	2,905,736
1930...	27,019,367	2,383,571	41,215,220	113,530,976	5,453,182	2,368,612	30,427,742	54,953,320	2,521,588
1931...	21,081,157	2,176,910	35,964,537	97,975,915	10,057,808	1,931,880	23,580,901	35,480,701	2,184,917
1932...	16,201,279	2,223,505	25,638,466	85,910,030	9,058,365	1,681,728	21,174,061	27,326,173	2,014,618
1933...	16,966,183	2,107,682	28,141,482	110,205,021	9,026,951	2,477,425	19,702,953	30,794,504	2,073,052
1934...	23,310,729	2,156,151	31,269,945	145,565,871	9,776,934	2,977,061	20,228,851	41,206,965	1,669,083
1935...	23,183,128	2,821,027	39,124,696	158,934,269	12,052,417	3,816,943	22,289,681	48,692,050	1,430,246
1936...	26,672,278	2,587,891	49,736,919	184,532,892	11,315,527	6,970,397	23,305,726	54,407,036	2,390,706
1937...	30,314,188	2,763,643	65,160,215	230,042,517	15,751,645	10,271,463	25,597,117	73,555,798	3,902,506
1938[2]..	26,255,803	3,766,265	68,337,326	221,498,321	17,096,230	7,558,669	31,654,299	64,096,499	4,560,810

[1] Includes production from the Northwest Territories in 1932-38. [2] Figures for 1938 are subject to revision.

The quantities and values of the minerals produced in each province during 1937 are shown in Table **5**. This table shows the different minerals which make up the mineral production of each province and also the particular province or provinces which contribute to the production of each mineral in Canada.

5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1937.

Note.—The mineral production of Yukon and the Northwest Territories during the calendar year 1937 was as follows, in quantities and values: gold 47,982 fine oz., $1,678,890 (current price); lead 6,440,454 lb., $329,107; silver 4,091,946 fine oz., $1,836,507; coal 84 tons, $812; petroleum 11,371 bbl., $56,855; natural gas 1,500 M cu. ft., $335; total, $3,902,506. Radium and uranium salts were produced in Canada in 1937 from ores mined in the N.W.T., but statistics pertaining to those minerals are not available for publication. For Dominion totals by individual minerals, see Table 2. Dashes in this table indicate that there was no production reported.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
Metallics.								
Antimony[1].....lb.	48,163	–	–	–	–	–	–	–
$	7,394	–	–	–	–	–	–	–
Arsenic (As_2O_3).lb.	–	–	–	1,389,426	–	–	–	–
$	–	–	–	41,032	–	–	–	–
Bismuth.......lb.	–	–	–	5,711	–	–	–	–
$	–	–	–	5,654	–	–	–	–
Cadmium......lb.	–	–	–	–	164,223	144,553	–	436,431
$	–	–	–	–	269,326	237,067	–	715,747
Chromite......ton	–	–	[2]	[2]	–	–	–	–
$	–	–	3,286	39,964	–	–	–	–
Cobalt.........lb.	–	–	–	507,064	–	–	–	–
$	–	–	–	848,145	–	–	–	–
Copper.........lb.	180,609	–	94,653,132	322,039,208	44,920,835	22,436,843	–	45,797,988
$	23,620	–	12,378,737	41,716,364	5,874,747	2,934,290	–	5,989,461
Gold[3]......fine oz.	19,918	–	711,480	2,587,095	157,949	65,886	46	505,857
$	696,931	–	24,894,685	90,522,454	5,526,636	2,305,351	1,610	17,699,936
Lead...........lb.	418,086	–	1,521,182	29,849	–	–	–	403,589,913
$	21,364	–	77,732	1,525	–	–	–	20,623,445
Manganese ore..ton	–	85	–	–	–	–	–	–
$	–	817	–	–	–	–	–	–
Molybdenite (concentrates). ton	–	–	–	8	–	–	–	–
$	–	–	–	8,147	–	–	–	–
Nickel.........lb.	–	–	–	224,790,974	–	–	–	[2]
$	–	–	–	59,469,423	–	–	–	37,753
Palladium, rhodium, iridium, etc. fine oz.	–	–	–	119,829	–	–	–	–
$	–	–	–	3,179,782	–	–	–	–
Platinum...fine oz.	–	–	–	139,355	–	–	–	22
$	–	–	–	6,751,750	–	–	–	1,066
Selenium.......lb.	–	–	208,531	116,696	43,920	28,080	–	–
$	–	–	360,759	201,884	75,982	48,578	–	–
Silver......fine oz.	26,990	–	908,590	4,693,047	905,179	821,818	4	11,530,177
$	12,113	–	407,784	2,106,286	406,253	368,840	2	5,174,859
Tellurium......lb.	–	–	26,439	6,651	5,124	3,276	–	–
$	–	–	45,739	11,506	8,865	5,667	–	–
Titanium ore...ton	–	–	4,229	–	–	–	–	–
$	–	–	26,432	–	–	–	–	–
Zinc...........lb	5,485,550	–	8,566,927	120,011	36,221,314	32,750,910	–	287,192,877
$	268,902	–	419,951	5,883	1,775,569	1,605,449	–	14,078,195
Totals, Metallics..... $	**1,030,324**	**817**	**38,615,105**	**204,909,799**	**13,937,378**	**7,505,242**	**1,612**	**64,320,462**
Non-Metallics.								
FUELS.								
Coal...........ton	7,256,954	364,714	–	–	3,172	1,049,348	5,562,839	1,598,843
$	25,640,819	1,180,611	–	–	7,709	1,494,337	14,563,911	5,863,849
Natural gas M cu.ft.	–	576,671	–	10,746,334	600	100,380	20,955,506	–
$	–	283,922	–	6,588,798	180	35,130	4,766,437	–
Peat...........ton	–	–	–	478	–	–	–	–
$	–	–	–	2,676	–	–	–	–
Petroleum, crude. bbl.	–	18,089	–	165,205	–	–	2,749,085	–
$	–	25,496	–	356,000	–	–	4,961,002	–
TOTALS, FUELS. $	25,640,819	1,490,029	–	6,947,474	7,889	1,529,467	24,291,350	5,863,849

---

[1] Contained in concentrates exported. [2] Not available. [3] Current price in Canadian funds.

5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1937—continued.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
Non-Metallics—concluded.								
OTHER NON-METALLICS.								
Asbestos.......ton	–	–	410,025	1	–	–	–	–
$	–	–	14,505,541	250	–	–	–	–
Bituminous sands. ton	–	–	–	–	–	–	35	–
$	–	–	–	–	–	–	142	–
Diatomite.....ton	481	–	–	38	–	–	–	124
$	15,392	–	–	1,868	–	–	–	1,346
Feldspar.......ton	–	–	12,285	9,061	–	–	–	–
$	–	–	105,612	72,610	–	–	–	–
Fluorspar......ton	–	–	–	150	–	–	–	–
$	–	–	–	2,550	–	–	–	–
Graphite....... $	–	–	–	125,343	–	–	–	–
Grindstones (includes pulpstones, etc.). ton	37	288	–	–	–	–	–	87
$	4,415	12,139	–	–	–	–	–	4,875
Gypsum........ton	926,796	36,906	–	53,780	13,941	–	–	15,764
$	978,288	131,727	–	233,895	88,095	–	–	108,478
Iron oxides (ochre). ton	–	–	5,617	–	–	–	–	580
$	–	–	77,640	–	–	–	–	6,000
Lithium minerals..... $	–	–	–	–	1,694	–	–	–
Magnesitic dolomite..... $	–	–	677,207	–	–	–	–	–
Magnesium sulphate. ton	–	–	–	–	–	–	–	727
$	–	–	–	–	–	–	–	14,456
Mica...........lb.	–	–	1,092,105	798,271	–	–	–	–
$	–	–	124,594	9,137	–	–	–	–
Mineral	–	–	198,319	26,700	–	–	–	–
waters...imp. gal.	–	–	19,697	889	–	–	–	–
Nepheline-syenite....... $	–	–	–	121,481	–	–	–	–
Phosphate.....ton	–	–	100	–	–	–	–	–
$	–	–	900	–	–	–	–	–
Quartz.........ton	11,732	–	127,535	1,142,372	–	95,809	–	–
$	14,078	–	448,327	633,073	–	33,533	–	–
Salt............ton	47,865	–	–	407,701	3,391	–	–	–
$	216,401	–	–	1,539,599	43,465	–	–	–
Silica brick.....M	2,926	–	–	818	–	–	–	–
$	121,146	–	–	59,980	–	–	–	–
Soapstone[1]..... $	–	–	40,513	–	–	–	–	–
Sodium carbonate.... ton	–	–	–	–	–	–	–	286
$	–	–	–	–	–	–	–	2,574
Sodium sulphate...... ton	–	–	–	–	–	79,804	80	–
$	–	–	–	–	–	617,548	480	–
Sulphur[2].......ton	–	–	28,534	14,009	–	–	–	88,370
$	–	–	194,496	140,090	–	–	–	820,406
Talc...........ton	–	–	–	12,457	–	–	–	–
$	–	–	–	123,301	–	–	–	–
TOTALS, OTHER NON-METALLICS. $	1,349,720	143,866	16,194,527	3,064,066	133,254	651,081	622	958,135
Totals, Non-Metallics..... $	**26,990,539**	**1,633,895**	**16,194,527**	**10,011,540**	**141,143**	**2,180,548**	**24,291,972**	**6,821,984**
Clay Products and Other Structural Materials.								
CLAY PRODUCTS.								
Brick—								
Soft Mud Process—								
Face...... M	–	–	600	9,015	–	–	61	228
$	–	–	7,527	157,160	–	–	1,385	9,472
Common.. M	171	1,882	1,784	9,149	5,234	–	1,691	3,725
$	1,800	26,868	17,539	120,731	77,868	–	20,390	51,338

---

[1] Includes some talc. [2] Sulphur content of pyrites shipped and estimated sulphur contained in sulphuric acid and elemental sulphur made from waste smelter gases.

5.—Detailed Mineral Production of Canada, by Provinces, calendar year 1937—concluded.

Mineral.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.
CLAY PRODUCTS—concluded.								
Brick—concluded.								
Stiff Mud Process (wire cut)—								
Face..... M	639	798	13,043	21,904	299	54	109	764
$	14,307	17,688	250,737	416,048	7,553	1,561	2,177	25,544
Common... M	4,472	1,849	33,475	13,516	–	258	553	1,566
$	58,753	21,853	458,485	187,776	–	2,555	3,212	22,996
Dry Press—								
Face....... M	–	–	1,659	9,277	–	59	1,570	–
$	–	–	40,283	177,837	–	1,677	13,745	–
Common....M	–	–	3,292	3,272	–	–	7,572	–
$	–	–	51,025	48,220	–	–	53,417	–
Fancy or ornamental M	–	–	–	55	–	–	–	–
brick. $	–	–	–	2,972	–	–	–	–
Sewer brick. M	–	–	–	175	–	–	–	–
$	–	–	–	2,777	–	–	–	–
Paving brick M	–	–	–	–	–	–	–	3
$	–	–	–	–	–	–	–	131
Firebrick.... M	–	–	–	–	–	522	10	2,418
$	–	–	–	–	–	27,010	474	115,343
Fireclay........ton	2,660	42	–	–	–	4,713	–	650
$	8,208	1,660	–	–	–	11,868	–	9,332
Fireclay blocks and shapes... $	753	800	–	–	–	63,106	–	10,772
Tile—								
Hollow ton	4,471	589	20,016	32,864	638	775	2,841	2,332
blocks. $	40,898	4,586	169,632	262,988	5,432	7,553	20,903	21,851
Roofing tile. No.	–	–	–	36,152	–	–	–	24,390
$	–	–	–	2,117	–	–	–	1,185
Floor tile sq.ft.	–	–	–	70,329	–	–	–	2,862
(quarries). $	–	–	–	11,708	–	–	–	461
Drain tile... M	70	366	464	9,605	58	–	44	784
$	2,991	17,261	13,950	233,258	3,524	–	2,200	25,786
Sewer pipe, copings, flue linings, etc...... $	279,136	355	43,415	338,895	–	–	85,490	42,919
Pottery, glazed or unglazed... $	–	32,805	–	54,581	–	–	135,245	9,578
Bentonite......ton	–	–	–	–	132	–	–	31
$	–	–	–	–	1,154	–	–	817
Other clay products..... $	–	–	560	16,777	–	–	–	2,115
TOTALS, CLAY PRODUCTS.... $	406,846	123,876	1,053,153	2,033,845	95,531	115,330	338,638	349,640
OTHER STRUCTURAL MATERIALS.								
Cement.......bbl.	–	–	2,578,623	2,650,652	328,518	–	267,106	344,072
$	–	–	3,537,798	3,657,067	745,736	–	531,541	623,725
Lime..........ton	17,687	19,899	156,313	294,467	22,597	–	10,651	27,739
$	150,115	150,362	909,116	2,152,644	215,165	–	93,478	154,037
Sand and .ton	2,992,429	1,136,013	9,476,000	8,832,526	1,380,957	822,447	711,966	1,648,963
gravel. $	1,457,266	715,652	2,637,495	3,613,854	551,464	470,343	312,687	733,935
Slate..........ton	–	–	414	300	–	–	–	186
$	–	–	471	2,258	–	–	–	2,790
Stone..........ton	178,721	57,468	1,957,982	4,222,700	41,191	–	13,225	463,425
$	279,098	139,041	2,212,550	3,661,510	65,228	–	27,189	549,225
TOTALS, OTHER STRUCTURAL MATERIALS.....$	1,886,479	1,005,055	9,297,430	13,087,333	1,577,593	470,343	964,895	2,063,712
Totals, Clay Products and Other Structural Materials.... $	**2,293,325**	**1,128,931**	**10,350,583**	**15,121,178**	**1,673,124**	**585,673**	**1,303,533**	**2,413,352**
Grand Totals (Canadian Funds)..... $	**30,314,188**	**2,763,643**	**65,160,215**	**230,042,517**	**15,751,645**	**10,271,463**	**25,597,117**	**73,555,798**

Section 3.—Industrial Statistics of Mines and Minerals—Capital, Labour, Wages, etc., in the Mineral Industries.

Annual statistical reports on the mineral production of Canada have been published for many years, first by the Geological Survey, later by the Mines Branch of the Department of Mines, and, since 1921, by the Dominion Bureau of Statistics. Prior to that year the annual statistics of mines were confined chiefly to a presentation of the quantity production of each of the minerals and their value at average market prices for the year. The scope of the statistics now includes a general review of the principal mineral industries, such as the copper-gold, silver-lead-zinc, and nickel-copper industries, as well as a section on metallurgical works. The additional data include such features as capital employed, numbers of employees, wages and salaries paid, and net value of sales, while for 1934 and 1935 there was added a special survey of expenditures for equipment, supplies, freight, and insurance by the mining industry, and for 1937 a similar survey for the metal-mining and smelting industries only. The aim has been to extend the mining statistics beyond a summary of the production of individual minerals, by approaching the subject from the standpoint of industrial organization, definitely illustrating the place which mining holds in the scheme of Canadian productive enterprise.

A new figure "net income from sales" has been introduced since 1935 in accordance with a recommendation adopted by the Conference of Commonwealth Statisticians in Ottawa in 1935. The net income from sales is obtained by deducting the cost of fuel, electricity, and consumable supplies (explosives, lubricants, chemicals, etc.), consumed in the production process, from the net sales. In view of the fact that statistics of process supplies were not collected prior to 1935, it is impossible to present statistics of net income from sales for previous years comparable to this new figure beginning with 1935.

The figures for net income from sales of industries given in Tables **6** and **7** are those reported by the operators, and are in each case the settlements received for shipments by producers and the additional values obtained when the smelting of ores is completed in Canada. The totals indicate more nearly the actual return to the different industries than do the values for the minerals in Table **2** of this chapter, where, in the cases of copper, lead, zinc, and silver, the values are computed by applying the average prices for the year in the principal metal markets to the total production from mines and smelters with no reduction for fuel, electricity, and other supplies consumed in the production process. Some imported ores and concentrates are treated in Canadian non-ferrous smelting and refining works. The net sales of these plants include, therefore, the net value of the metals recovered from these imported ores and to this extent the net sales shown in Tables **6** and **7** include products not of Canadian origin.

Subsection 1.—Principal Factors in the Mineral Industries.

Capital.—In connection with the item of capital, operators are requested to report *only the capital actually invested in the enterprises*, including: (1) present value of lands, buildings, plant, machinery, and tools; (2) cost of materials on hand, supplies, finished products, and ore on dump; and (3) cash, trading and operating accounts, and bills receivable. It should be specially noted that no estimate of ore reserves is included in the capital. Indeed, capital expenditures in mining ventures are frequently very difficult to designate. For instance, purely exploratory workings might properly be charged to current expenses, but if these exploratory workings open up new ore resources and become the channel by which such ore is utilized, such workings become part of the productive plant and as such their cost is an item of capital. On the other hand, after an ore body is exhausted, much of the mining plant has practically no resale value and, for this reason, many companies drastically write off the capital value of their plant during profitable years of operation. In these circumstances, the actual amount of capital employed in mining enterprises is uncertain and the figures of capital given in Tables **6** and **7** should be used with such reservations in mind.

Employees.—Tables **6** and **7** below also show the numbers of persons directly employed in the operating mineral industries. These figures, however, do not include those engaged in prospecting and exploration for individuals or small syndicates from whom no returns can be obtained, amounting probably in the aggregate to a considerable number. Neither do the figures include consulting geologists and mining engineers nor contract diamond drillers and their respective organizations.

Commodities and Services Purchased.—In addition to the expenditures for remuneration of those directly employed in the mineral industries, statistics are collected annually of expenditures for fuel and electricity, but the figures prior to 1935 given in Tables **6** and **7** are exclusive of the fuel and electricity used in metallurgical processes, such as reduction furnaces, electrolytic cells, etc. The mining industry expends annually large additional sums for the purchase of equipment, machinery, explosives, and a great variety of other supplies, and for freight and insurance. In special investigations to obtain an estimate of these expenditures, firms engaged in all the mineral industries were circularized regarding such expenditures in 1934 and 1935, while, for 1937, a similar survey covered operators in the metal-mining and smelting industries only. For the earlier surveys returns received covered fairly completely the operating firms in the metal-mining and fuel industries, but in the other groups of mineral industries, where there are many small operators of gravel pits, small quarries, etc., the returns were much less complete. Furthermore, no attempt was made to reach prospectors and small development parties, though their aggregate expenditures, with the exploratory activity that exists at present, would amount to a large sum. The figures resulting from the surveys* of 1934 and 1935 must, therefore, be regarded as suggestive rather than by any means comprehensive and the investigation for 1937 was confined to that portion of the mineral industry which could be most readily and completely covered. In 1935, the reported expenditures amounted to almost $85,000,000. Of this freight and express made up 14·7 p.c.; electric power, 12·6 p.c.; fuel and lubricants, 11·7 p.c.; timber and building materials, 7·8 p.c.; explosives, 6·5 p.c.; insurance, 6·0 p.c.; and the remaining 40 p.c. consisted of a great variety of purchases such as machinery and tools, railway equipment, electrical equipment, motor vehicles, rubber goods, chemicals, pipe, etc. The metal mines and smelters accounted for 77·7 p.c. of the expenditures and coal mines for 11·1 p.c. These expenditures for 1934 and 1935 were shown by commodity items, by industries, and by provinces at p. 356 of the 1937 Year Book. Expenditures during 1937 are shown by principal commodities in the statement on p. 329. The comparable expenditures by the gold-mining industry in 1935 amounted to $28,707,000 or 33·8 p.c. of the total, and by the base-metal mining and smelting industries to $37,182,000 or 43·9 p.c. of the total reported expenditures by all the mineral industries in 1935. Therefore such expenditures by the gold mines in 1937 increased 41·5 p.c. and by the base-metal mines and smelters 59·5 p.c. as compared with 1935.

---

* The results of these surveys are given in the "Special Report on the Consumption of Supplies by the Canadian Mining Industry" for 1934 and 1935, and in special bulletins on the consumption of supplies by the gold-mining and the base-metal mining, smelting and refining industries in 1937, published by the Mining, Metallurgical and Chemical Branch of the Dominion Bureau of Statistics, and obtainable from the Dominion Statistician.

PURCHASES BY THE CANADIAN METAL-MINING AND SMELTING INDUSTRIES, 1937.

Item.	Gold Mining and Milling.	Base-Metal Mining and Smelting.
	$	$
Belting and rubber goods (belting of all kinds, rubber boots, hose, valves, etc.)	395,481	576,813
Cars, locomotives, and mechanical parts	436,113	393,710
Track materials (rails, fittings, switches, etc.)	432,463	372,021
Explosives (powder, fuse, detonators)	4,705,128	2,303,358
Diamonds and bort for drilling	174,483	48,299
Mining machinery and parts (rock drills, hoists, pumps, etc.)	2,851,464	1,501,846
Mill machinery, equipment, and parts (grinding, screening, separating, etc.)	4,077,901	2,507,454
Smelter machinery, equipment, and parts	33,676	1,854,361
Miscellaneous machinery, tools, and parts (machine, blacksmith, and carpenter shop, welding, etc.)	1,039,521	1,037,191
Safety equipment, apparel, miners' lamps, etc	214,423	246,089
Electrical equipment, supplies, etc	1,595,835	2,157,674
Lumber, timber, etc	2,848,090	3,227,606
Building materials, other	1,320,137	1,663,330
Chemicals, cyanide, flotation reagents, etc	1,913,665	2,171,218
Refractories, smelter fluxes	118,805	2,547,601
Pipe, fittings, plumbing supplies, valves, etc	1,290,175	1,217,268
Drill and tool steels	935,807	437,023
Iron and steel, castings, bars, plates, bolts, wire rope, wire, etc	1,563,937	2,539,955
Copper, brass, non-ferrous metal goods	51,627	500,596
Motor cars, trucks, and accessories	190,944	189,077
Coal, coke, wood, solid fuel	759,688	8,078,219
Fuel oils, kerosene, gasoline, lubricants	1,280,154	1,868,244
Miscellaneous materials, *n.o.p*	2,542,422	1,343,199
Electric power	4,517,217	6,327,729
Hospital, office, engineering equipment, supplies, etc	298,852	256,877
Freight and express	2,411,127	12,548,672
Insurance (fire, workmen's compensation, etc.)	2,626,222	1,416,279
Totals (including other items not specified)	40,625,357	59,331,709

Subsection 2.—Growth of the Mining Industry in Recent Years.

Growth, 1922-29.—From 1922 to 1929, the output of the mineral industries increased by 72 p.c., capital investment by 76 p.c., employment by 53 p.c., and the salaries and wages by 65 p.c. Progress was most rapid in the metallic mineral industries, where the expansion in net production amounted to 170 p.c. with proportionate increases in capital and employment. The period from 1922 to 1929 was marked by a rising cycle of activity in construction. This was reflected in the expansion of industries engaged in the production of clay products and other structural materials. The output of this group of industries increased by 47 p.c. during the period, while, within the group, progress was much greater in industries producing cement, gravel, and stone than in the clay products industries. The group of non-metallic mineral industries remained relatively stationary in contrast to the other two main groups during this period of rapid expansion. This may be attributed to the fact that coal mining is the predominant industry in the non-metallic group and, under increasing competition from oil fuels and hydro-electric power, did not participate in the general industrial expansion of the period.

Developments Since 1929.—Following 1929 the mining industry in Canada was affected for some years by the world-wide economic disturbances and by a very drastic decline in the prices of most of the principal metals, especially copper, lead, zinc, and silver. In the case of gold, on the other hand, since 1931 the price has risen to a level about 69 p.c. above that formerly prevailing. Under the influence of the early decline in base-metal prices, the value of the net production of the metallic mineral industries declined by 27 p.c. from 1929 to 1932, with a decline of 29 p.c. in employees and 30 p.c. in salaries and wages paid. But, since the higher price for gold stimulated its production and the readjustment of costs stabilized the base-metal industries, metal production has expanded again, and while the net sales in 1937 were not on a comparable basis with those of 1929, employees were 76·8 p.c. above, and salaries and wages 80·5 p.c. above 1929. While industrial statistics for 1938 are not yet available, the production figures for this latest year indicate that metal production was well maintained in spite of lower prices for base metals.

Among the non-metallic industries the demand for coal declined during the depression years owing to reduced requirements in industrial and transportation activities. Similarly, the demand for asbestos and gypsum was affected by the lower level of industrial and construction operations. Salt was an exception to the general rule, as its production was well maintained throughout, partly owing to its increased consumption in certain chemical industries. A large measure of recovery has taken place in this group of industries, especially in the production of non-metallic minerals other than fuels.

The production of clay products and other structural materials is directly dependent upon construction activities within Canada. During the early years of the depression, these activities were partly maintained by governmental relief projects and by the carrying to completion of some large operations which had commenced before 1930. As a result, construction reached its lowest level in Canada during 1933, and the group of industries producing clay products and other structural materials was at a lower level of operation in that year than in any other year recorded since 1921. From 1929 to 1933 there was a decline of 71 p.c. in net sales, 69 p.c. in employees, 74 p.c. in salaries and wages and 76 p.c. in expenditures for fuel and electricity, a large item in the cost of production in these industries. However, construction has been more active in Canada since 1933 (see ChapterXV) and this increased activity has been accompanied by a welcome change to a rising trend in the production of clay products and other structural materials, although these industries are still at a low level compared with their activity prior to 1929.

6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929-37, and by Provinces, 1937.

NOTE.—For the years 1921-28, see the 1936 Year Book, pp. 355-356. In the past, the net value of production, called "net sales", in these industries has been gross sales less freight and treatment charges in the case of mines, and less the value of ores charged in the case of smelters. According to a recommendation adopted by the Conference of Commonwealth Statisticians in Ottawa, 1935, the net figure, called the "net income from sales", is now obtained from net sales as defined above by a further deduction of the costs of fuel, electricity, and consumable supplies used in the production process. In the table below, however, to facilitate comparison with previous years, figures for 1935 are given to show deductions and resultant net by both methods, and figures since then on the new basis only.

Group and Year.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity for Heat and Power.[1]	Net Sales.[2]
	No.	$	No.	$	$	$
METALLIC MINERALS.						
1929	528	427,498,173	31,125	50,279,511	11,221,987	163,050,366
1930	352	427,439,265	30,623	48,851,303	11,323,313	137,015,892
1931	327	390,908,034	25,434	41,829,288	10,340,523	132,382,514
1932	330	269,180,464	21,931	34,983,704	8,551,463	119,790,072
1933	402	406,998,952	25,443	37,937,871	7,084,253	150,145,926
1934	636	465,583,818	34,143	50,818,448	9,144,600	186,785,532
1935	619	437,471,769	38,603	59,528,350	10,199,214	217,353,515
					151,846,099[1]	173,588,815[3]
1936	867	507,796,987	46,455	72,016,670	188,371,440[1]	211,444,303[3]
1937	1,000	584,692,790	55,046	90,798,501	268,514,346[1, 4]	276,885,288[3]

For footnotes, see end of Table, p. 331.

6.—Summary of the Principal Statistics of the Mineral Industries in Canada, by Groups, 1929-37, and by Provinces, 1937—concluded.

Group, Year and Province.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Fuel and Electricity for Heat and Power.[1]	Net Sales.[2]
	No.	$	No.	$	$	$
NON-METALLIC MINERALS.						
1929	5,494	317,302,496	40,080	55,602,313	6,033,773	93,596,188
1930	5,191	328,776,596	38,355	47,852,675	5,785,483	80,063,355
1931	5,374	325,168,359	34,075	36,031,233	4,870,674	61,629,210
1932	5,246	302,294,837	31,654	29,918,319	4,497,602	54,389,856
1933	5,327	283,796,783	30,532	27,309,607	4,695,254	54,912,205
1934	5,605	263,120,280	32,195	31,763,492	5,219,565	60,580,554
1935	6,181	244,237,709	32,755	33,150,704	5,152,971 16,705,125[1]	62,407,314 45,739,144[3]
1936	6,224	257,057,806	34,768	37,280,814	12,270,765[1]	59,475,472[3]
1937	6,271	273,578,624	37,144	43,199,558	15,319,093[1]	67,042,550[3]
CLAY PRODUCTS AND OTHER STRUCTURAL MATERIALS.						
1929	3,126	122,220,364	23,897	18,608,687	9,495,825	58,534,834
1930	3,562	131,204,998	20,222	17,271,354	7,957,397	53,727,465
1931	3,877	125,983,627	13,300	14,108,778	6,298,151	44,158,295
1932	4,804	113,736,272	7,885	6,870,026	3,427,419	22,398,283
1933	5,144	109,496,612	7,359	4,784,327	2.245,397	16,696,687
1934	5,411	102,319,089	7,167	5,544,246	2,838,327	19,286,761
1935	6,098	95,790,621	8,898	7,401,505	3,004,647 3,962,091[1]	23,215,400 19,253,309[3]
1936	6,138	94,208,302	9,776	7,468,738	4,718,167[1]	21,052,574[3]
1937	8,137	99,073,560	13,224	10,294,325	6,001,510[1]	28,868,189[3]
Grand Totals, Mineral Industries—						
1929	**9,148**	**867,021,033**	**95,102**	**124,490,511**	**26,751,585**	**315,181,388**
1930	**9,105**	**887,420,859**	**89,200**	**113,975,332**	**25,066,193**	**270,806,712**
1931	**9,578**	**842,060,020**	**72,809**	**91,969,299**	**21,509,348**	**238,170,019**
1932	**10,380**	**685,211,573**	**61,470**	**71,772,049**	**16,476,484**	**196,578,211**
1933	**10,873**	**800,292,347**	**63,334**	**70,031,805**	**14,024,904**	**221,754,818**
1934	**11,652**	**831,023,187**	**73,505**	**88,126,186**	**17,202,492**	**266,652,847**
1935	**12,898**	**777,500,099**	**80,256**	**100,080,559**	**18,356,832** **172,513,315**[1]	**302,976,229** **238,581,268**[3]
1936	**13,229**	**859,063,095**	**90,999**	**116,766,222**	**205,360,362**[1]	**291,972,359**[3]
1937	**15,408**	**957,344,974**	**105,414**	**144,292,384**	**289,834,949**[1]	**372,796,027**[3]
1937.						
Nova Scotia and P.E.I.	1,210	59,114,458	15,629	18,373,958	6,076,253	22,597,547
New Brunswick	423	4,676,203	3,012	1,509,063	293,867	2,442,101
Quebec	5,120	181,868,872	19,121	22,708,131	67,723,503	60,872,828
Ontario	6,343	389,129,937	36,238	58,891,339	145,830,800	190,447,576
Manitoba	275	55,815,784	3,159	4,301,366	14,293,086	13,415,841
Saskatchewan	247	22,037,133	2,307	2,372,443	7,376,254	8,226,326
Alberta	637	110,055,642	10,843	12,924,934	2,819,959	20,988,638
British Columbia	1,135	121,739,009	14,282	21,487,277	44,123,775	51,176,437
Yukon and N.W.T.	18	12,907,936	823	1,723,873	1,297,452	2,628,733

---

[1] Exclusive of fuel and electricity used in metallurgical processes, except for the footnoted figures for 1935, 1936 and 1937, which include all fuel and electricity (whether for metallurgical processes or not) and also the cost of consumable supplies. [2] See headnote. [3] This is "net income from sales"; see headnote. [4] Includes cost of freight and treatment charges reported for the first time in 1937. They were formerly deducted by the shipper of metal-bearing ores in reporting the value of such ores shipped.

Subsection 3.—The Principal Mineral Industries.

A summary of the industrial statistics of the principal mineral industries operating in Canada in 1936 and 1937 is presented in Table 7. Gold mining had in 1937 the largest labour force, having exceeded coal mining for the first time in that year. Employment in the gold industry is much less subject to seasonal fluctuations and its expenditures on salaries and wages are considerably greater than those of the coal-mining industry. The smelting and refining industry was third in the number of its employees and in salaries and wages paid.

7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1936 and 1937.

NOTE.—See headnote to Table 6, p. 330.

Industry and Year.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Purchased Fuel, Electricity, and Consumable Supplies.	Net Income from Sales.[1]
	No.	$	No.	$	$	$
Metallic Minerals.						
Alluvial gold.........1936	85	10,965,524	853	1,519,659	166,574[2]	2,893,981
1937	109	11,919,937	1,069	1,689,911	176,560	3,066,636
Auriferous quartz.....1936	607	256,018,578	25,097	39,826,742	19,882,784	88,210,233
1937	659	269,145,649	29,140	48,219,318	24,714,827[3]	97,961,278
Copper-gold-silver....1936	27	40,732,717	3,738	5,473,325	3,652,068	15,619,897
1937	38	73,338,258	5,164	8,240,614	15,832,950[3]	24,902,851
Silver-cobalt..........1936	25	5,946,702	363	458,546	181,592	915,376
1937	25	2,655,060	300	394,386	312,624[3]	540,762
Silver-lead-zinc.......1936	89	19,372,600	1,870	2,917,832	1,894,495	13,814,645
1937	130	29,637,739	2,220	3,914,643	5,788,385[3]	22,740,582
Nickel-copper.........1936	9	30,131,192	4,406	7,331,542	4,102,807	18,710,379
1937	11	33,979,540	5,462	10,193,491	5,185,229[3]	25,812,659
Miscellaneous metals..1936	11	770,957	113	142,974	30,345	3,147
1937	15	1,320,012	121	155,191	33,385	52,655
Smelting and refining.1936	14	143,858,717	10,015	14,346,050	158,460,775	71,276,645
1937	13	162,696,595	11,570	17,990,947	216,470,386	101,807,865
Totals, Metallic Minerals........1936	**867**	**507,796,987**	**46,455**	**72,016,670**	**188,371,440**[2]	**211,444,303**
1937	**1,000**	**584,692,790**	**55,046**	**90,798,501**	**268,514,346**[3]	**276,885,288**
Non-Metallic Minerals.						
FUELS.						
Coal..................1936	553	109,703,043	26,918	28,873,135	8,088,154	34,852,621
1937	503	118,273,848	27,202	31,641,679	8,717,711	37,261,013
Natural gas...........1936	3,253	77,666,568	2,075	2,456,918	79,034	9,062,657
1937	3,268	75,611,107	2,028	2,488,125	98,880	8,938,446
Petroleum............1936	2,266	33,289,876	1,052	1,298,592	510,016	3,439,317
1937	2,328	42,147,521	1,620	2,340,359	1,109,966	4,892,672
TOTALS, FUELS....1936	6,072	220,659,487	30,045	32,628,645	8,677,204	47,354,595
1937	6,099	236,032,476	30,850	36,470,163	9,926,557	51,092,131
OTHER NON-METALLIC MINERALS.						
Abrasives (natural)...1936	8	77,279	30	17,442	3,528	34,846
1937	[4]	[4]	[4]	[4]	[4]	[4]
Asbestos.............1936	11	18,877,326	2,647	2,642,924	2,399,475	7,558,708
1937	11	21,249,676	3,842	4,232,507	4,076,235	10,429,556
Feldspar, quartz, and nepheline-syenite ...1936	34	1,400,024	324	238,848	160,913	628,769
1937	39	1,352,992	445	384,698	186,470	1,242,244
Gypsum..............1936	14	8,954,654	514	440,297	218,869	1,060,102
1937	13	6,902,222	602	595,396	263,077	1,277,406
Iron oxides...........1936	6	167,499	39	30,281	11,419	58,211
1937	6	213,248	50	35,368	13,878	69,762
Mica..................1936	22	221,800	101	44,550	4,824	69,732
1937	34	150,569	199	97,547	17,546	116,185
Salt..................1936	9	3,856,187	506	640,644	212,697	1,560,447
1937	9	4,001,568	543	653,136	259,064	1,540,401
Talc and soapstone....1936	7	647,929	85	70,935	33,392	143,878
1937	7	625,497	83	72,020	25,394	138,420
Miscellaneous[5]........1936	41	2,195,621	477	526,248	548,434[2]	1,006,194[2]
1937[4]	53	3,050,376	530	658,723	550,872	1,136,445
TOTALS, OTHER NON-METALLIC MINERALS1936	152	36,398,319	4,723	4,652,169	3,593,551[2]	12,120,887[2]
1937	172	37,546,148	6,294	6,729,395	5,392,536	15,950,419
Totals, Non-Metallic Minerals.....1936	**6,224**	**257,057,806**	**34,768**	**37,280,814**	**12,270,755**[2]	**59,475,482**[2]
1937	**6,271**	**273,578,624**	**37,144**	**43,199,558**	**15,319,093**	**67,042,550**

For footnotes, see end of table, p. 333.

7.—Summary of the Principal Statistics of the Mineral Industries of Canada, by Industries, 1936 and 1937—concluded.

Industry and Year.	Plants or Mines.	Capital Employed.	Employees.	Salaries and Wages.	Purchased Fuel, Electricity, and Consumable Supplies.	Net Income from Sales.[1]
	No.	$	No.	$	$	$
Clay Products and Other Structural Materials.						
CLAY PRODUCTS.						
Brick, tile, and sewer pipe....1936	136	19,487,227	1,651	1,397,395	747,183	2,506,008
1937	137	20,087,448	2,159	2,002,075	1,121,754	3,163,758
Stoneware and pottery....1936	4	376,204	124	100,753	19,171	198,665
1937	6	339,784	128	92,717	14,569	216,778
TOTALS, CLAY PRODUCTS......1936	140	19,863,431	1,775	1,498,148	766,354	2,704,673
1937	143	20,427,232	2,287	2,094,792	1,136,323	3,380,536
OTHER STRUCTURAL MATERIALS.						
Cement....1936	9	53,343,991	1,052	1,196,664	2,169,071	4,739,121
1937	9	54,150,672	1,083	1,373,444	2,445,333	6,650,534
Lime....1936	57	6,106,901	799	640,322	839,979	2,495,991
1937	57	4,931,831	872	781,274	1,038,958	2,785,959
Sand and gravel......1936	5,374	2,994,127	3,638	2,090,388	101,059	6,820,340
1937	7,373	6,706,288	6,084	3,468,471	295,348	10,197,348
Stone....1936	558	11,899,852	2,512	2,043,216	841,704	4,292,449
1937	555	12,857,537	2,898	2,576,344	1,085,548	5,853,812
TOTALS, OTHER STRUCTURAL MATERIALS.1936	5,998	74,344,871	8,001	5,970,590	3,951,813	18,347,901
1937	7,994	78,646,328	10,937	8,199,533	4,865,187	25,487,653
Totals, Clay Products and Other Structural Materials...1936	**6,138**	**94,208,302**	**9,776**	**7,468,738**	**4,718,167**	**21,052,574**
1937	**8,137**	**99,073,560**	**13,224**	**10,294,325**	**6,001,510**	**28,868,189**
Grand Totals, Mineral Industries...1936	**13,229**	**859,063,095**	**99,999**	**116,766,222**	**205,360,362**[2]	**291,972,359**[2]
1937	**15,408**	**957,344,974**	**105,414**	**144,292,384**	**289,834,949**	**372,796,027**

---

[1] See headnote to Table 6, p. 330. [2] Revised since publication of the 1938 Year Book. [3] Includes freight and treatment charges. See footnote 4, Table 6, p. 331). [4]"Abrasives (natural)" are included with "Miscellaneous" in 1937. [5] Includes a small production of peat, normally included in fuels.

Section 4.—Production of Metallic Minerals.

The metals of chief importance in Canada are cobalt, copper, gold, iron, lead, nickel, those of the platinum group, radium, silver, and zinc. These are dealt with in separate subsections in alphabetical order. In addition, there are a number of others produced in minor quantities, principally as by-products in the treatment of metalliferous ores, and their production during the three latest years is shown in Table 2, while their production by provinces in 1937 appears in Table **5**.

Subsection 1.—Cobalt.

The major portion of the world supply of cobalt was for almost two decades prior to 1925 derived from the ore bodies of the Cobalt district, which were discovered in 1903, and carry silver, cobalt, nickel, bismuth, and arsenic. Large deposits of cobalt-bearing ores occur in Africa in the Belgian Congo, Northern Rhodesia, and French Morocco, and the introduction into world markets of cobalt from this source has increased world production while Canadian production has declined since 1925.

8.—Production of Cobalt in Canada, calendar years 1904-38.

NOTE.—Quantities and values as reported by the Ontario Bureau of Mines up to 1920; thereafter by the Dominion Bureau of Statistics.

Calendar Year.	Quantity.	Value	Calendar Year.	Quantity.	Value
	lb.	$		lb.	$
1904	32,000	19,960	1922	569,960	1,852,370
1905	236,000	100,000	1923	888,061	2,530,974
1906	642,000	80,704	1924	948,704	1,682,395
1907	1,478,000	104,426	1925	1,116,492	2,328,517
1908	2,448,000	111,118	1926	664,778	1,136,014
1909	3,066,000	94,965	1927	880,590	1,764,534
1910	2,196,000	54,699	1928	956,590	1,672,320
1911	1,704,000	170,890	1929	929,415	1,801,915
1912	1,868,000	314,381	1930	694,163	1,144,007
1913	1,642,000	420,386	1931	521,051	651,179
1914	702,000	590,406	1932	490,631	587,957
1915	412,000	383,261	1933	466,702	597,752
1916	800,000	805,014	1934	594,671	592,497
1917	674,000	1,138,190	1935	681,419	512,705
1918	760,000	1,640,310	1936	887,591	804,676
1919	596,000	1,019,479	1937	507,064	848,145
1920	566,000	1,605,365	1938[1]	459,060	788,576
1921	251,986	755,958			

[1] Preliminary figures.

Subsection 2.—Copper.

The earliest important copper-mining district in Canada was in the Eastern Townships of Quebec. There is still an annual production from this field. Production from the Sudbury district became important about 1889, and from the mines of British Columbia about 1896. From 1898 to 1929 British Columbia was the leading copper-producing province due to the mines of the Rossland and Boundary districts, the Copper Mountain mine, and the Britannia and Hidden Creek mines along the coast. Shortly after the War, large development programs were carried out in connection with the Noranda and other copper-producing properties of western Quebec, with the Flinflon and Sherritt-Gordon properties in western Manitoba, and a very large expansion program at the nickel-copper properties of Sudbury. The effect of these developments has been the tremendous increase since 1927 in the production of copper and nickel as well as associated metals such as platinum, palladium, selenium and tellurium. Modern and efficient mining methods and plants, and the presence in the ores of small but appreciable quantities of precious metals have made possible the profitable production of copper even under the relatively low prices prevailing since 1930.

9.—Quantities of Copper Produced in Canada, by Provinces, with Total Values, calendar years 1911-38.

NOTE.—For the years 1886 to 1910, see Canada Year Book, 1916-17, p. 272.

Year.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	British Columbia.	Yukon.	Totals.	
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	$
1911.......	2,436,190	17,932,263	–	–	35,279,558	–	55,648,011	6,886,998
1912.......	3,282,210	22,250,601	–	–	50,526,656	1,772,660[1]	77,832,127	12,718,548
1913.......	3,455,887	25,885,929	–	–	45,791,579	1,843,530	76,976,925	11,753,606
1914.......	4,201,497	28,948,211	–	–	41,219,202	1,367,050	75,735,960	10,301,606
1915.......	4,197,482	39,361,464	–	–	56,692,988	533,216	100,785,150	17,410,635
1916.......	5,703,347	44,997,035	–	–	63,642,550	2,807,096	117,150,028	31,867,150
1917.......	5,015,560	42,867,774	1,116,000[1]	–	57,730,959	2,460,097	109,227 332[2]	29,687,989[2]
1918.......	5,869,649	47,074,475	2,339,751	–	62,865,681	619,878	118,769,434	29,250,536
1919.......	2,691,695	24,346,623	3,348,000	–	44,502,079	165,184	75,053,581	14,028,265
1920.......	880,638	32,059,993	3,062,577	–	45,319,771	277,712	81,600,691	14,244,217
1921.......	352,308	12,821,385	Nil	–	34,447,127	Nil	47,620,820	5,953,555
1922.......	Nil	10,943,636	"	–	31,936,182	"	42,879,818	5,738,177
1923.......	"	31,656,800	"	–	55,224,737	"	86,881,537	12,529,186
1924.......	1,893,008	37,113,193	"	–	65,451,246	"	104,457,447	13,604,538
1925.......	2,510,141	39,718,777	"	–	69,221,600	"	111,450,518	15,649,882
1926.......	2,674,058	41,312,867	"	–	89,108,017	"	133,094,942	17,490,300
1927.......	3,119,848	45,341,295	"	–	91,686,297	"	140,147,440	17,195,487
1928.......	33,697,949	66,607,510	"	–	102,283,210	107,377	202,696,046	28,598,249
1929.......	55,337,169	88,879,853	"	–	103,903,738	Nil	248,120,760	43,415,251
1930.......	80,310,363	127,718,871	2,087,609	–	93,318,885	42,628	303,478,356	37,948,359
1931.......	68,376,985	112,882,625	45,821,432	–	65,223,348	Nil	292,304,390	24,114,065
1932.......	67,336,692	77,055,413	52,706,861	–	50,580,104	"	247,679,070	15,294,058
1933.......	69,943,882	145,504,720	38,163,181	3,223,941[1]	43,146,724	"	299,982,448	21,634,853
1934.......	73,968,545	205,059,539	30,867,141	6,618,913	48,246,924	"	364,761,062	26,671,438
1935.......	79,050,906	252,027,928	38,011,371	11,429,452	38,478,043	"	418,997,700	32,311,960
1936.......	66,340,175	287,914,078	29,853,220	14,971,609	21,169,343	"	421,027,732[3]	39,514 101[3]
1937.......	94,653,132	322,039,208	44,920,835	22,436,843	45,797,988	"	530,028,615[3]	68,917,219[3]
1938[4]......	112,645,797	324,494,386	65,582,772	18,156,157	65,141,290	"	586,020,402	58,026,972

[1] First reported production in this province or territory. [2] Includes a small production from New Brunswick and Alberta. [3] Includes 779,307 lb. valued at $73,855 produced in Nova Scotia in 1936, and 180,609 lb. at $23,620 in 1937. [4] Preliminary figures.

World Production of Copper.—World production of copper was estimated at 2,300,000 long tons in 1937, as compared with 1,920,000 long tons in 1929, the previous record year. Canada had an output of 236,620 tons in 1937, producing about 12·2 p.c. of the estimated world total and standing fourth among the nations.

10.—Copper Production of the Leading Countries and of the World, 1913-37.

(In long tons of 2,240 lb.)

NOTE.—Figures in this table, except as indicated, are from the Imperial Institute's Statistical Summary.

Year.	Canada.[1]	Northern Rhodesia.	Belgian Congo.	Chile.	Japan.	Mexico.	Peru.	Spain and Portugal	United States.	World Production.[2]
1913...	34,365	–	–	41,584	64,538	51,951	27,321	35,431	548,442	957,745
1914...	33,811	–	–	43,947	69,330	35,753	26,654	26,475	517,083	911,815
1915...	44,993	–	–	51,500	74,204	30,471	34,169	36,513	635,827	1,060,868
1916...	52,299	–	–	70,142	99,098	54,242	42,386	34,840	867,074	1,369,013
1917...	48,762	–	–	100,879	106,302	46,739	44,450	40,254	858,050	1,410,424
1918...	53,022	–	–	105,224	88,913	74,315	43,700	45,175	864,899	1,401,360
1919...	33,506	–	–	78,322	77,204	59,519	38,610	34,447	539,859	954,854
1920...	36,429	–	–	97,388	66,721	44,523	32,461	22,637	567,186	966,654
1921...	21,259	–	–	58,303	53,238	12,121	32,758	32,675	203,946	536,571
1922...	19,143	–	–	127,527	53,271	26,645	35,833	35,923	457,116	888,433
1923...	38,786	–	–	179,502	62,781	54,052	43,468	50,996	673,214	1,260,696
1924...	46,633	–	–	187,371	61,945	43,884	34,371	54,208	731,250	1,359,280
1925...	49,755	74[3]	88,681[3]	187,191	64,654	52,788	36,768	57,083	762,500	1,419,390
1926...	59,417	708	79,365	199,121	64,533	55,628	41,699	57,083	783,929	1,462,044
1927...	62,566	3,290	87,748	235,930	65,519	56,929	46,820	53,885	756,624	1,502,108
1928...	90,489	5,930	110,680	282,269	67,155	64,536	55,556	55,000	807,945	1,690,000
1929...	110,768	5,466	134,828	315,566	74,277	85,187	55,228	67,000	890,674	1,920,000
1930...	135,481	6,269	136,754	216,844	77,785	72,252	46,800	66,000	629,529	1,580,000
1931...	130,493	22,800	118,000	221,000	74,650	53,354	43,600	56,000	472,210	1,360,000
1932...	110,571	87,238	53,000	101,600	70,741	34,698	24,691	34,000	212,599	890,000
1933...	133,921	129,423	65,544	160,814	67,942	39,196	30,773	31,000	211,969	1,260,000
1934...	162,840	157,599	108,346	252,646	65,944	43,569	27,283	32,000	211,969	1,260,000
1935...	187,053	168,659	105,981	262,864	68,215	38,751	30,237	32,000	339,724	1,470,000
1936...	187,959	170,728	94,156	252,162	76,505	29,244	32,825	27,000	548,674	1,700,000
1937[4]..	236,620	245,888	148,210	410,000	86,215	45,350	36,000	32,518	748,009	2,300,000

[1] Dominion Bureau of Statistics figures. [2] Totals include productions of other countries not specified. [3] First reported production for this country. [4] Preliminary figures except for Canada.

Subsection 3.—Gold.

Canada has been a gold-producing country for over 75 years. During the last half of the 19th century production was chiefly from placer operations in British Columbia and Yukon, while during the present century there has been a rapid growth of production from lode mining both of auriferous quartz and of gold in association with other metals. Gold production in Canada attained its earlier maximum in 1900, when the Yukon production reached its highest point and 1,350,057 fine oz. of gold were produced. The quantities and values of gold produced in Canada are given by provinces for 1911 and subsequent years in Tables **11** and **12.** The official estimate for 1938 is 4,715,480 fine oz.

Producers of gold have benefited in recent years not only from the general decline in the prices of other commodities, with a consequent reduction in their operating costs, but also from the rise in the world price of gold itself. Under the stimulus of higher prices, prospecting for gold has been more active during recent years than ever before.

Gold is produced in Nova Scotia, at points across the Canadian Shield from Quebec to the Northwest Territories, and in the Cordilleran region of British Columbia and Yukon. Except for comparatively small amounts obtained from alluvial workings in Yukon, British Columbia, and Alberta, the production is derived from lode mining either of auriferous quartz or of other metallic ores such as copper, nickel, and zinc which carry varying amounts of gold. The principal producing districts are: western Quebec; the adjacent districts of Kirkland Lake and Porcupine in Ontario, with other smaller camps scattered across northern Ontario to the western boundary; the Rice Lake and Gods Lake areas in eastern Manitoba and the Flinflon district on the Manitoba-Saskatchewan boundary; and the Bridge River district in British Columbia. Among new areas at present under active development may be mentioned Lac la Ronge and Goldfields near lake Athabaska in Saskatchewan, Yellowknife north of Great Slave lake in the Northwest Territories, and Zeballos on the west coast of Vancouver island. With new areas of promise being discovered, and with the reserves in older camps being extended and operations expanded, there is every prospect for the continued increase of gold mining in Canada. At the present time the leading gold mine in Canada is the Lake Shore mine in the Kirkland Lake camp, the second is the Hollinger of Porcupine and the third is Noranda, the copper-gold mine of the Rouyn district of Quebec. In 1937 about 85·2 p.c. of the total production came from auriferous quartz mines, about 12·6 p.c. from mines in which gold was associated with ores of copper, nickel, zinc, etc., and about 2·2 p.c. from alluvial operations. The number of producing auriferous quartz mines increased from 37 in 1930 to 189 in 1937.

11.—Quantities of Gold Produced in Canada, by Provinces, calendar years 1911-38.

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, pp. 268-269.

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Total.
	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.
1911....	7,781	613	2,062	–	–	10	238,496	224,197	473,159
1912....	4,385	642	86,523	–	–	73	251,815	268,447	611,885
1913....	2,174	701	219,801	–	–	Nil	297,459	282,838	802,973
1914....	2,904	1,292	268,264	–	–	48	252,730	247,940	773,178
1915....	6,636	1,099	406,577	–	–	195	273,376	230,173	918,056
1916....	4,562	1,034	492,481	–	–	82	219,633	212,700	930,492
1917....	2,210	1,511	423,261	440[1]	–	Nil	133,742	177,667	738,831
1918....	1,176	1,939	411,976	1,926	–	27	180,163	102,474	699,681
1919....	850	1,470	505,739	724	–	24	167,252	90,705	766,764

For footnotes, see end of table, p. 337.

11.—Quantities of Gold Produced in Canada, by Provinces, calendar years 1911-38—concluded.

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Total.
	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.	oz. fine.
1920....	690	955	564,995	781	–	Nil	124,808	72,778	765,007
1921....	439	635	708,213	207	–	49	150,792	65,994	926,329
1922....	1,042	Nil	1,000,340	156	–	Nil	207,370	54,456	1,263,364
1923....	655	667	971,704	31	–	"	200,140	60,144	1,233,341
1924....	1,047	883	1,241,728	1,180	–	"	245,719	34,825	1,525,382
1925....	1,626	1,602	1,461,039	4,424	–	"	219,227	47,817	1,735,735
1926....	1,678	3,680	1,497,215	188	–	"	225,866	25,601	1,754,228
1927....	3,151	8,331	1,627,050	182	–	42	183,094	30,935	1,852,785
1928....	1,290	60,006	1,578,434	19,813	–	68	196,617	34,364	1,890,592
1929....	2,687	90,798	1,622,267	22,455	–	5	154,204	35,892	1,928,308
1930....	1,272	141,747	1,736,012	23,189	–	Nil	164,331	35,517	2,102,068
1931....	460	300,075	2,085,814	102,969	–	195	160,069	44,310	2,693,892
1932....	964	401,105	2,280,105	122,507	11[1]	83	199,004	40,608	3,044,387
1933....	1,382	382,886	2,155,519	125,310	5,400	324	238,995	39,493	2,949,309
1934....	3,525	390,097	2,105,339	132,321	5,405	393	296,196	38,798	2,972,074
1935....	9,376	470,552	2,220,336	142,613	14,323	150	391,633	35,907[2]	3,284,890[2]
1936....	11,960	666,905	2,378,503	139,273	48,981	109	451,938	50,359[2]	3,748,028[2]
1937....	19,918	711,480	2,587,095	157,949	65,886	46	505,857	47,982	4,096,213
1938[3]....	26,613	879,881	2,897,401	185,672	50,021	305	596,279	79,308[2]	4,715,480[2]

[1] First reported production in this province. [2] Includes production of the Northwest Territories amounting to 200 oz. fine in 1935; 1 oz. fine in 1936; and 6,794 oz. fine in 1938. [3] Preliminary figures.

12.—Values of Gold Produced in Canada, by Provinces, calendar years 1911-38.

NOTE.—For the years 1862 to 1910, see Canada Year Book, 1916-17, p. 270.

Year.	Nova Scotia.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Total.
	$	$	$	$	$	$	$	$	$
1911..	160,854	12,672	42,625	–	–	207	4,930,145	4,634,574	9,781,077
1912..	90,638	13,270	1,788,596	–	–	1,509	5,205,485	5,549,296	12,648,794
1913..	44,935	14,491	4,543,690	–	–	Nil	6,149,027	5,846,780	16,598,923
1914..	60,031	26,708	5,545,509	–	–	992	5,224,393	5,125,374	15,983,007
1915..	137,180	22,720	8,404,693	–	–	4,026	5,651,184	4,758,098	18,977,901
1916..	94,305	21,375	10,180,485	–	–	1,695	4,540,216	4,396,900	19,234,976
1917..	45,685	31,235	8,749,581	9,095[3]	–	Nil	2,764,693	3,672,703	15,272,992
1918..	24,310	40,083	8,516,299	39,814	–	558	3,724,300	2,118,325	14,463,689
1919..	17,571	30,388	10,454,553	14,966	–	500	3,457,406	1,875,039	15,850,423
1920..	14,263	19,742	11,679,483	16,145	–	Nil	2,580,010	1,504,455	15,814,098
1921..	9,075	13,127	14,640,062	4,279	–	1,013	3,117,147	1,364,217	19,148,920
1922..	21,540	Nil	20,678,862	3,225	–	Nil	4,286,718	1,125,705	26,116,050
1923..	13,540	13,788	20,086,904	641	–	"	4,137,261	1,243,287	25,495,421
1924..	21,643	18,253	25,668,795	24,393	–	"	5,079,462	719,897	31,532,443
1925..	33,612	33,116	30,202,357	91,452	–	"	4,531,824	988,465	35,880,826
1926..	34,687	76,072	30,950,180	3,886	–	"	4,669,065	529,220	36,263,110
1927..	65,137	172,217	33,634,108	3,762	–	868	3,784,889	639,483	38,300,464
1928..	26,667	1,240,434	32,629,126	409,571	–	1,406	4,064,434	710,367	39,082,005
1929..	55,545	1,876,961	33,535,234	464,186	–	103	3,187,680	741,954	39,861,663
1930..	26,295	2,930,170	35,886,552	479,359	–	Nil	3,397,023	734,202	43,453,601
1931..	9,920	6,471,075	44,980,280	2,220,512	–	4,205	3,451,865	955,539	58,093,396
1932[1].	22,634	9,417,572	53,534,743	2,876,350	258[2]	1,949	4,672,429	953,438	71,479,373
1933..	39,525	10,950,539	61,647,843	3,583,866	154,440	9,267	6,835,257	1,129,500	84,350,237
1934..	121,613	13,458,347	72,634,195	4,565,075	186,472	13,558	10,218,762	1,338,531	102,536,553
1935..	329,942	16,558,725	78,133,624	5,018,551	504,026	5,279	13,781,565	1,263,567[3]	115,595,279[3]
1936..	418,959	23,361,683	83,318,960	4,878,733	1,715,804	3,818	15,831,388	1,764,076[3]	131,293,421[3]
1937..	696,931	24,894,685	90,522,454	5,526,636	2,305,351	1,610	17,699,936	1,678,890	143,326,493
1938[4].	936,112	30,949,814	101,916,080	6,531,013	1,759,489	10,728	20,974,114	2,789,659[3]	165,867,009[3]

[1] From 1911 to 1931, inclusive, values calculated on basis 1 fine oz.=$20·671834; since then, at world prices in Canadian funds. [2] First reported production in this province. [3] Includes value of production of the Northwest Territories amounting to $7,038 in 1935; $35 in 1936; and $140,444 in 1938. [4] Preliminary figures.

World Production.—A sketch of the development of the gold-mining industry of the world since the discovery of America may refer to four successive periods. During the first period extending from 1493 to 1760, the annual production averaged nearly 337,000 fine oz. The placer mining of Brazil and Colombia swelled the average output of the last 60 years of the period to about 606,000 fine oz. per year.

The production of Russia from placer mining was a considerable factor in the next period, extending from 1761 to 1840, that country retaining first rank among the world's producers until 1837. The average annual production during the period was 565,500 fine oz.

The third period, extending from 1841 to 1890, was notable for the remarkable discoveries of gold in California and Australia in 1848 and 1851, respectively. The annual average during the 50 years was 4,937,000 fine oz. For the first decade the average was 1,761,000 fine oz. and for the second 6,448,000, while in the last decade it declined to 5,201,000. The production of the period was contributed chiefly by the United States, Australia, and Russia.

In the fourth period, extending from 1891 to the present time, covered by the figures of Table **13**, the outstanding features were the entry of South Africa as an important and later as the leading producer, the increase in the output of most of the gold-producing countries through the introduction of the cyanide process and, more recently, the rapidly increasing world production as a result of the appreciation in the value of gold. The output was 6,320,000 fine oz. in 1891 and a steady increase was recorded until 1915, when 22,847,000 fine oz. were produced. Thereafter, the great increase in wages and in the other costs of production of an article of fixed value brought about a steady decline to a minimum production of 15,497,000 fine oz. in 1922. However, the notable decline in general commodity price levels which occurred in 1921 and 1922 again reduced the costs of gold production and the industry responded with a distinctly upward trend thereafter throughout the 1920's. The increased price of gold since 1930 has accelerated the expansion in world production during recent years with all previous records being exceeded.

13.—Quantities and Values of World Production of Gold, 1891-1937.

(From the Annual Report of the Director of the United States Mint.)

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	oz. fine.	$		oz. fine.	$		oz. fine.	$
1891......	6,320,194	130,650,000	1907.....	19,977,260	412,966,600	1923.....	17,845,349	368,896,948
1892......	7,094,266	146,651,500	1908.....	21,422,244	422,837,000	1924.....	18,619,481	384,899,578
1893......	7,618,811	157,494,800	1909.....	21,965,111	454,059,100	1925.....	18,673,178	384,009,921
1894......	8,764,362	181,175,600	1910.....	22,022,180	455,239,100	1926.....	19,117,568	395,198,984
1895......	9,615,190	198,763,600	1911.....	22,397,136	462,989,761	1927.....	19,058,736	393,979,954
1896......	9,783,914	202,251,600	1912.....	22,605,068	467,288,203	1928.....	18,885,849	390,386,574
1897......	11,420,068	236,073,700	1913.....	22,556,347	466,284,303	1929.....	19,207,452	397,153,303
1898......	13,877,806	286,879,700	1914.....	21,652,883	447,608,337	1930.....	20,903,736	432,118,638
1899......	14,837,775	306,724,100	1915.....	22,846,608	472,283,884	1931.....	22,284,290	460,650,527
1900......	12,315,135	254,576,300	1916.....	22,032,542	455,455,670	1932.....	24,098,676	498,163,970
1901......	12,625,527	260,992,900	1917.....	20,346,043	420,592,147	1933.....	25,400,295	525,070,547
1902......	14,354,680	296,737,600	1918.....	18,588,127	384,251,378			
1903......	15,852,620	327,702,700	1919.....	17,339,679	358,443,791	1934.....	27,372,374	958,033,090[1]
1904......	16,804,372	347,377,200	1920.....	16,146,830	333,784,924	1935.....	29,999,245	1,049,973,580
1905......	18,396,451	380,288,300	1921.....	15,997,692	330,702,190	1936.....	32,930,554	1,152,569,390
1906......	19,471,080	402,503,000	1922.....	15,496,859	320,349,102	1937[2]...	34,740,055	1,215,901,925

[1] At \$20·67+ per oz. fine prior to 1934; at \$35 per oz. fine in 1934 and later years. [2] Preliminary figures.

In 1937 the world's chief producers were the Union of South Africa, with 33·7 p.c., U.S.S.R. (Russia), including Siberia, with 14·3 p.c., United States with 11·8 p.c. and Canada with 11·8 p.c.* As Australia, Rhodesia, British West Africa, and British India were also important producers, about 56·6 p.c. of the world production of 1937 was produced in the British Empire.

Detailed statistics of world gold production for 1936 and 1937 appear in Table **14**.

---

* This percentage, derived from world production, as reported by the Director of the United States Mint, is slightly less than that derived from estimates of the Imperial Institute, as given on p. 317.

14.—Quantities and Values of the World Production of Gold and Silver, by Principal Countries, calendar years 1936 and 1937.

(Abridged from the Annual Report of the Director of the United States Mint.)

Country.	Calendar Year 1936.				Calendar Year 1937.[1]			
	Gold.		Silver.		Gold.		Silver.	
	Quantity.	Value ($35·00 per oz.).	Quantity.	Value ($0·45399 per oz.).[2]	Quantity.	Value ($35·00 per oz.).	Quantity.	Value ($0·45195 per oz.).[2]
	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$
NORTH AMERICA—								
U.S.A.	3,759,645	131,587,575	63,350,587	28,760,533	4,112,160	143,925,600	71,298,929	32,223,551
Canada	3,748,028	131,180,980	18,334,487	8,323,674	4,095,872	143,355,520	22,683,032	10,251,596
Mexico	753,967	26,388,845	77,463,901	35,167,836	846,400	29,624,000	84,680,875	38,271,522
Newfoundland	15,070	527,450	1,249,472	567,248	22,673	793,555	1,447,613	654,249
Totals	8,276,710	289,684,850	160,398,447	72,819,291	9,077,105	317,698,675	180,110,449	81,400,918
CENTRAL AMERICA AND WEST INDIES	140,000[3]	4,900,000	3,600,000[3]	1,634,364	140,000[3]	4,900,000	3,600,000[3]	1,627,020
SOUTH AMERICA—								
Bolivia	32,151	1,125,285	10,723,333	4,868,280	37,092	1,298,220	9,454,022	4,272,745
Brazil	125,420	4,389,700	23,887	10,844	145,771	5,101,985	44,239	19,994
Chile	258,460	9,046,100	1,431,383	649,833	315,560	11,044,600	1,786,263	807,302
Colombia	389,506	13,632,710	151,494	68,777	442,222	15,477,770	167,971	75,914
Peru	152,409	5,334,315	19,901,309	9,034,995	168,663	5,903,205	16,993,595	7,680,255
Venezuela	110,438	3,865,330	[4]	–	116,514	4,077,990	[4]	–
Totals[5]	1,243,641	43,527,435	32,840,038	14,909,048	1,388,729	48,605,515	29,056,912	13,132,271
EUROPE—								
Czechoslovakia	16,236	568,260	1,088,719	494,267	10,031	351,085	1,108,943	501,186
France	85,682	2,998,870	473,323	214,884	72,757	2,546,495	400,000[6]	180,780
Germany	7,588	265,580	6,541,551	2,969,799	7,587	265,545	6,541,550	2,956,454
Italy	14,211	497,385	575,000[7]	261,044	17,232	603,120	650,000[7]	293,768
Roumania	150,755	5,276,425	485,380	220,358	166,540	5,828,900	670,214	302,903
Sweden	164,033	5,741,155	588,294	267,080	157,731	5,520,585	550,774	248,922
U.S.S.R.	5,173,000[8]	181,055,000	6,590,000	2,991,794	4,969,000[8]	173,915,000	7,228,933	3,267,116
Yugoslavia	84,106	2,943,710	1,785,620	810,654	87,578	3,065,230	2,242,546	1,013,519
Totals[5]	5,701,109	199,538,815	19,703,534	8,945,208	5,500,221	192,507,735	20,810,981	9,405,523
ASIA—								
British India	333,239	11,663,365	5,977,345	2,713,655	331,636[9]	11,607,260	6,204,642[9]	2,804,188
China	154,966	5,423,810	146,614	66,561	154,966	5,423,810	146,607	66,259
Korea	562,316	19,684,060	1,891,137	858,557	734,580	25,710,300	2,672,978	1,208,053
Japan	713,685	24,978,975	9,765,572	4,433,472	713,685[10]	24,978,975	9,765,572[10]	4,413,550
Philippine Is.	597,266	20,901,310	491,701	223,227	716,967	25,093,845	719,771	325,301
Totals[5]	2,572,162	90,025,670	19,379,841	8,798,254	2,829,892	99,046,220	20,539,116	9,282,654
OCEANIA—								
Australia[11]	1,426,981	49,944,335	12,759,849	5,792,845	1,620,445	56,715,575	14,455,776	6,533,288
New Zealand	164,575	5,760,125	432,973	196,565	168,487	5,897,045	443,981	200,657
Totals[5]	1,608,499	56,297,465	13,194,012	5,989,950	1,813,849	63,484,715	14,903,229	6,735,514
AFRICA—								
Belgian Congo	402,486	14,087,010	2,780,396	1,262,272	431,688	15,108,380	3,215,074	1,453,053
British W.A.	428,144	14,985,040	[4]	–	559,212	19,572,420	[4]	–
French W.A.	114,424	4,004,840	[4]	–	128,217	4,487,595	[4]	–
S. Rhodesia.	797,061	27,897,135	145,072	65,861	804,220	28,147,700	152,038	68,714
Union S.A.	11,336,214	396,767,490	1,075,626	488,323	11,734,575	410,710,125	1,100,641	497,435
Totals[5]	13,388,433	468,595,155	4,579,984	2,079,267	13,990,259	489,659,065	4,852,911	2,193,273
Totals for World[5]	**32,930,554**	**1,152,569,390**	**253,695,856**	**115,175,382**	**34,740,055**	**1,215,901,925**	**273,873,598**	**123,777,173**

---

[1] Subject to revision. [2] Average price per fine oz. in New York. [3] Estimate based on imports of ore and bullion into United States and Great Britain, and interrogatory data. [4] None reported. [5] Totals include other countries not specified. [6] Estimate based on other years' production. [7] Data from the 1937 Year Book of the American Bureau of Metal Statistics. [8] Conjectural. [9] Incomplete. [10] Prior years' figures. [11] Including New Guinea and Papua.

Subsection 4.—Iron.*

Iron ore is widely distributed in Canada and extensive deposits have been discovered from time to time, but none at present available can compete in low cost with high-grade external sources of supply.

Bog iron ore was first mined and smelted in the province of Quebec early in the eighteenth century, and from that time until 1883 the industry was carried on almost continuously at Three Rivers. Other furnaces using local ore were operated at Radnor Forges and Drummondville, the last to shut down being the Drummondville furnace in 1911.

No ores for the production of iron have been mined in Canada since 1923. The large iron and steel industry of Nova Scotia draws its requirements from the easily accessible and abundant supplies of the high-grade Wabana deposit in Newfoundland. In Ontario, also, there has been a broad development of the primary iron and steel industry largely because cheap and high-grade supplies of iron ore are readily available from the Mesabi range of Minnesota, while coal supplies are drawn from the nearby coal-fields of Pennsylvania.

15.—Iron Ore Shipments and Production of Pig Iron, Ferro-Alloys, and Steel Ingots and Castings, calendar years 1911-38.

NOTE.—For the years 1886-1910, see Canada Year Book, 1936, p. 373.

Calendar Year.	Ore Shipments from Canadian Mines.	Production of Pig Iron.				Production of Ferro-Alloys.	Production of Steel Ingots and Castings.
		Nova Scotia.	Quebec.	Ontario.	Canada.		
	short tons.[1]	long tons.[1]	long tons.[1]	long tons.[1]	long tons.[1]	long tons.[1]	long tons.[1]
1911	210,344	348,430	588	470,210	819,228	6,703	787,854
1912	215,883	379,459	Nil	526,422	905,881	6,995	855,072
1913	307,634	428,632	“	579,374	1,008,006	7,210	1,043,744
1914	244,854	202,725	“	496,529	699,254	6,718	739,858
1915	398,112	375,246	“	440,625	815,871	9,638	911,414
1916	275,176	419,692	“	624,287	1,043,979	25,556	1,275,222
1917	215,302	421,560	12,224	611,287	1,045,071	38,808	1,558,691
1918	211,608	371,313	28,598	667,545	1,067,456	39,914	1,672,954
1919	197,170	254,542	6,876	558,029	819,447	43,394	919,948
1920	129,072	296,869	7,887	668,812	973,568	27,781	1,100,622
1921	59,509	151,343	610	441,876	593,829	22,608	667,484
1922	17,971	120,769	Nil	262,198	382,967	21,602	480,127
1923	30,752	277,654	“	602,168	879,822	41,887	881,523
1924	Nil	177,078	“	415,971	593,049	35,034	659,767
1925	“	201,795	“	368,971	570,766	25,709	752,503
1926	“	250,238	“	507,079	757,317	57,050	776,262
1927	“	249,549	“	460,148	709,697	56,230	907,945
1928	“	302,756	“	734,971	1,037,727	44,482	1,234,719
1929	“	310,801	“	769.359	1,080,160	89,116	1,378,024
1930	“	212,636	“	534,542	747,178	65,223	1,009,578
1931	“	101,393	“	318,645	420,038	46,764	672,109
1932	“	30,697	“	113,433	144,130	16,161	339,346
1933	“	118,514	“	108,803	227,317	30,133	409,979
1934	“	133,360	“	271,635	404,995	31,921[2]	757,782
1935	“	208,002	“	391,873	599,875	56,616	941,527
1936	“	257,148	“	421,083	678,231	76,284	1,115,779
1937	“	320,318	“	578,537	898,855	82,072	1,402,882
1938[3]	“	241,946	“	463,153	705,099	53,322	1,155,995

[1] Although shipments of ore are expressed in short tons, the trade uses long tons as the quantity unit for pig iron, etc. [2] Revised since publication of the 1938 Year Book. [3] Preliminary figures.

A revival in iron-ore mining in Ontario is indicated by the fact that, during the summer of 1937, the Algoma Properties Ltd. commenced rebuilding the surface equipment at the new Helen mine in the Michipicoten district, where reserves are estimated at 60,000,000 tons of iron carbonate rather high in sulphur and therefore requiring roasting to fit it for use in the blast furnace. An Act passed by the Ontario Legislature has provided for a bounty of two cents per unit of iron content for a period of 10 years commencing Jan. 1, 1939.

---

* The known resources of iron ore were briefly described at p. 411 of the 1934-35 Year Book, and a sketch of the iron and steel industry of Canada was given on pp. 452-456 of the 1922-23 Year Book.

From Table **15** it will be observed that the tonnage of pig iron made in Canada in 1929 exceeded that of any previous year, while the 1929 quantities of steel ingots and castings made were exceeded in 1937 and in the War years 1917 and 1918. Production declined greatly after 1929, but has been recovering since 1932. Production in the ferro-alloy industry (ferro-manganese, ferro-silicon, etc.) provides the chief source of exports of primary iron products from Canada.

Subsection 5.—Lead.

Lead is obtained in Canada largely from the ores of British Columbia, where production began with 88,665 lb. in 1891. Bounties were paid on lead produced in Canada from 1899 to 1918 (see the 1920 Year Book, p. 454) but the highest production of this period was 56,900,000 lb. in 1905. However, as a result of developments in British Columbia mentioned below, production has increased greatly since the War, as shown in Table **16**.

16.—Quantities and Values of Lead Produced from Canadian Ores, calendar years 1911-38.

NOTE.—For figures for the years 1887–1910, see 1929 Year Book, p. 367.

Year.	Quantity.	Value.	Price per Pound.	Year.	Quantity.	Value.	Price per Pound.
	lb.	$	cts.		lb.	$	cts.
1911	23,784,969	827,717	3·480	1925	253,590,578	23,127,460	9·120
1912	35,763,476	1,597,554	4·467				
				1926	283,801,265	19,240,661	6·751[2]
1913	37,662,703[1]	1,754,705	4·659	1927	311,423,161	16,477,139	5·256
1914	36,337,765	1,627,568	4·479	1928	337,946,688	15,553,231	4·576
1915	46,316,450	2,593,721	5·600	1929	326,522,566	16,544,248	5·063
1916	41,497,615	3,532,692	8·513	1930	332,894,163	13,102,635	3·933
1917	32,576,281	3,628,020	11·137	1931	267,342,482	7,260,183	2·710
1918	51,398,002	4,754,315	9·250	1932	255,947,378	5,409,704	2·114
1919	43,827,669	3,053,037	6·966	1933	266,475,191	6,372,998	2·392
1920	35,953,717	3,214,262	8·940	1934	346,275,576	8,436,658	2·436
1921	66,679,592	3,828,742	5·742	1935	339,105,079	10,624,772	3·133
1922	93,307,171	5,817,702	6·219	1936	383,180,909	14,993,869	3·913
1923	111,234,466	7,985,522	7·179	1937	411,999,484	21,053,173	5·110
1924	175,485,499	14,221,345	8·104	1938[3]	418,913,257	14,008,459	3·344

[1] Previous to 1913 the figures reported show the metal content of the shipments and are somewhat in excess of the actual amounts recovered. Since 1912 the data given represent the quantities of lead produced in Canada from domestic ores, together with the estimated lead recovery from lead ores and concentrates exported. [2] From 1911 to 1925, average prices at Montreal; from 1926 to 1938, average yearly prices at London, England. [3] Preliminary figures.

British Columbia.—In the East and West Kootenay districts there are many important mines, the principal of which is the Sullivan lead-zinc mine near Kimberley. The ore averages about 11 p.c. lead, 7 p.c. zinc, and 5 ounces of silver to the ton. The successful solving by the Consolidated Mining and Smelting Co. of the metallurgical problems connected with the separation and reduction of these lead-zinc ores accounts to a considerable extent for the rapid growth in lead production during recent years. As a result of the low prices prevailing from 1930 to 1935 for lead, zinc, and silver, many of the small silver-lead mines of the Slocan have remained idle.

Other Provinces.—Occurrences of lead have been found in Gaspe peninsula and in the Rouyn district of Quebec, but the only production of importance has come from the Notre-Dame-des-Anges district, Portneuf County, where the Tetreault mine produces lead and zinc concentrates. Lead production in Ontario has come chiefly from the Galetta mine and smelter, which closed down in the summer of 1931. An important production of lead came in recent years from the silver-lead ores of the Mayo district of Yukon, and in 1935 production of silver-lead-zinc concentrates was resumed at the Sterling mine, Richmond County, Nova Scotia. Production by provinces in 1937 is shown in Table 5, pp. 324-326

World Production.*—The world production of lead in 1937 was about 1,650,000 long tons. The principal producers were the United States with 25·2 p.c., Australia 14·9 p.c., Mexico 12·4 p.c., Canada 11·2 p.c., Burma 5·5 p.c., Yugoslavia 4·2 p.c., Germany 4·2 p.c., and Russia 3·0 p.c.

Subsection 6.—Nickel.

With the exception of the small amounts of nickel recovered from the ores of the Cobalt district and relatively small shipments in recent years of nickel-copper ore from the B.C. Nickel Mines, Ltd., the Canadian production of nickel has been derived entirely from the well-known nickel-copper deposits of the Sudbury district, Ontario. The ore is mined principally for its nickel and copper content but gold, silver, selenium, tellurium, and metals of the platinum group, though present in relatively small quantities, are profitably recovered in the metallurgical processes. The proved deposits of nickel ore in Canada are estimated to be sufficient to provide for the world's requirements for many years, while there are still large reserves undeveloped.

Since the War, the producing companies have instituted extensive researches to discover and encourage new peace-time uses for the metal. The success attending their efforts, together with a great expansion in the plants at Sudbury, have accounted very largely for the marked increase in production. The automobile industry, electrical machinery, cooking utensils, new submarine cables, and various nickel alloys have all helped to absorb this increased production.

17.—Quantities and Values of Nickel Produced in Canada, calendar years 1911-38.

NOTE.—For figures for the years 1889-1910, see 1929 Year Book, p. 368.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	lb.	$		lb.	$		lb.	$
1911.....	34,098,744	10,229,623	1920....	61,335,706	24,534,282	1929....	110,275,912	27,115,461
1912.....	44,841,542	13,452,463	1921....	19,293,060	6,752,571	1930....	103,768,857	24,455,133
1913.....	49,676,772	14,903,032	1922....	17,597,123	6,158,993	1931....	65,666,320	15,267,453
1914.....	45,517,937	13,655,381	1923....	62,453,843	18,332,077	1932....	30,327,968	7,179,862
						1933....	83,264,658	20,130,480
1915.....	68,308,657	20,492,597	1924....	69,536,350	12,126,739[1]	1934....	128,687,340	32,139,425
1916.....	82,958,564	29,035,498	1925....	73,857,114	15,946,672	1935....	138,516,240	35,345,103
1917.....	82,330,280	33,732,112	1926....	65,714,294	14,374,163	1936....	169,739,393	43,876,525
1918.....	92,507,293	37,002,917	1927....	66,798,717	15,262,171	1937....	224,905,046	59,507,176
1919.....	44,544,883	17,817,953	1928....	96,755,578	22,318,907	1938[2]...	210,673,270	53,949,311

[1] A change in the method of computing the value of nickel production accounts for the drop in value after 1923. [2] Preliminary figures.

World Production.*—The world production of nickel was about 113,000 long tons in 1937, of which output about 89 p.c. was Canadian in origin, while the remainder was derived chiefly from New Caledonia.

---

* From the Imperial Institute's Statistical Summary.

Subsection 7.—Metals of the Platinum Group.

Metals of this group produced in Canada include platinum, palladium, rhodium, ruthenium, osmium, and iridium. Platinum and palladium are of chief importance. Since the early days there has been a small recovery of platinum associated with the gold of the alluvial deposits of British Columbia and other small amounts have been recovered in the refining of base metals at Trail. However, the chief source of these metals in Canada is the nickel-copper ore of Sudbury, and the great expansion in the mining industry of that district has resulted in a large increase in the production of the platinum metals, making Canada the leading producing country of the world. The next most important countries are Russia and Colombia.

18.—Quantities and Values of Platinum and Palladium Produced in Canada, 1921-38.

Note.—Records of platinum production in Canada go back to 1887, but the amounts were comparatively small and were not on the same basis as those of 1921.

Year.	Platinum.		Palladium.[1]		Year.	Platinum.		Palladium.[1]	
	oz. fine.	$	oz. fine.	$		oz. fine.	$	oz. fine.	$
1921.....	292	22,599	913	30,046	1930....	34,024	1,543,261	34,092	895,867
1922.....	470	45,863	1,219	78,340	1931....	44,775	1,596,900	46,918	1,217,717
1923.....	1,217	141,826	2,036	183,560	1932....	27,343	1,099,393	37,613	901,890
1924.....	9,186	1,091,427	9,516	863,113	1933....	24,786	857,590	31,009	645,043
1925.....	8,698	1,028,192	8,288	648,969	1934....	116,230	4,490,763	83,932	1,699,228
1926.....	9,521	923,607	10,024	640,178	1935....	105,374	3,445,730	84,772	1,962,937
1927.....	11,228	717,613	11,545	554,190	1936....	131,571	5,320,731	103,671	2,483,075
1928.....	10,532	708,909	13,707	627,833	1937....	139,377	6,752,816	119,829	3,179,782
1929.....	12,519	846,756	17,318	809,289	1938[2]...	161,317	5,196,504	130,893	3,677,392

[1] Includes also rhodium, ruthenium, osmium, and iridium. [2] Preliminary figures.

Subsection 8.—Radium and Uranium.*

The silver-pitchblende deposits of the Eldorado Gold Mines Ltd., at the east end of Great Bear lake were discovered in 1930. Since that time a modern mining and milling plant has been established at the deposits; extensive improvements in transportation facilities have been introduced over the 1,500-mile route from the railway at Waterways in Alberta down the Mackenzie, up the Great Bear river, and across the lake to the mine; and a plant for the refining of radium and uranium products has been brought into operation at Port Hope, Ont. Silver, copper, cobalt, and lead, as well as radium and uranium, are recovered from the ores. Extensive ore reserves have been indicated at the mine and during 1937-38 the capacity of the refining plant at Port Hope was approximately trebled. Canadian production from this source has resulted in a reduction of the world price of radium by about 62 p.c. from 1933 to approximately $22 per milligram in 1937, and of about 37 p.c. in the price of uranium salts during the same period.

---

* Contributed by the Director, Mines and Geology Branch, Department of Mines and Resources, Ottawa.

19.—Production of Radium and Uranium in Canada, 1933-37.

NOTE.—Figures are supplied by the Director, Mines and Geology Branch, Department of Mines and Resources, Ottawa, and are compiled from various published sources.

Year.	Radium.		Uranium Salts.	
	grams.	$	lb.	$
1933[1]	3·021	176,300	34,940	71,600
1934	2·820	112,800	27,748	46,600
1935	8·486	305,500	73,089	108,200
1936	15·613	405,900	160,662	208,900
1937	23·868	525,100	211,857	271,200

[1] First year of operation for Eldorado concentrator and refinery.

Subsection 9.—Silver.

Although no official statistics of the production of silver were published prior to 1887, the annual reports of the operating companies showed that from 1869 to 1885 about 4,000,000 oz. of silver, with a probable value of $4,800,000, were produced in the Port Arthur district in Ontario.

The current silver production of Canada is chiefly derived from the silver-lead-zinc ores of British Columbia, the silver-cobalt ores of northern Ontario, and the silver-lead ores exported from Yukon. An appreciable amount of silver also occurs in the gold ores of northern Ontario; the nickel ores of the Sudbury district; the copper-gold ores of Quebec, Manitoba, and British Columbia; and the pitchblende ores of the Great Bear Lake district in the Northwest Territories. Thus in Canada silver is produced chiefly in combination with other metals.

Silver production in Canada attained its maximum of 32,869,264 fine ounces in 1910 when the famous Cobalt silver camp was at its peak but production from that source has declined since then and now the Sullivan mine in British Columbia, primarily noted for its lead and zinc, is the largest producer of silver in Canada.

Statistics of the quantities and values of silver produced in Canada are given for the years since 1911 in Table **20**, while statistics of the quantities and values produced in the chief silver-producing provinces are given in Table **21**.

20.—Quantities and Values of Silver Produced in Canada, calendar years 1911-38.

NOTE.—For figures for the years 1887-1910, see p. 361 of the 1933 Year Book.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	oz. fine	$		oz. fine.	$		oz. fine.	$
1911	32,559.044	17,355,272	1920	13,330,357	13,450,330	1929	23,143,261	12,264,308
1912	31,955,560	19,440,165	1921	13,543,198	8,485,355	1930	26,443,823	10,089,376
1913	31,845,803	19,040,924	1922	18,626,439	12,576,758	1931	20,562,247	6,141,943
1914	28,449,821	15,593,631	1923	18,601,744	12,067,509	1932	18,347,907	5,811,081
1915	26,625,960	13,228,842	1924	19,736,323	13,180,113	1933	15,187,950	5,746,027
1916	25,459,741	16,717,121	1925	20,228,988	13,971,150	1934	16,415,282	7,790,840
1917	22,221,274	18,091,895	1926	22,371,924	13,894,531	1935	16,618,558	10,767,148
1918	21,383,979	20,693,704	1927	22,736,698	12,816,677	1936	18,334,487	8,273,804
1919	16,020,657	17,802,474	1928	21,936,407	12,761,725	1937	22,977,751	10,312.644
						1938[1]	22,157,154	9,633.265

[1] Preliminary figures.

21.—Quantities and Values of Silver Produced in Canada, by Provinces, calendar years 1911-38.

NOTE.—For the years 1887 to 1910, see Canada Year Book, 1916-17, p. 271. Nova Scotia, Saskatchewan, and Alberta have also shown a small production in recent years, production during 1937 being shown in Table 5 of this chapter, pp. 324-326.

Year	Quebec.		Ontario.		Manitoba.		British Columbia.		Yukon and Northwest Territories.	
	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$	oz. fine.	$
1911..	18,435	9,827	30,540,754	16.279,443	–	–	1,887,147	1,005,924	112,708	60,078
1912..	9,465	5,758	29,214,025	17,772,352	–	–	2,651,002	1,612,737	81,068	49,318
1913..	34,573	20,672	28,411,261	16,987,377	–	–	3,312,343	1,980,483	87,626	52,393
1914..	57,737	31,646	25,139,214	13,779,055	–	–	3,159,897	1,731,971	92,973	50,959
1915..	63,450	31,524	22,748,609	11,302,419	–	–	3,565,852	1,771,658	248,049	123,241
1916..	98,610	64,748	21,608,158	14,188,133	–	–	3,392,872	2,227,794	360,101	236,446
1917..	136,194	110,885	19,301,835	15,714,975	7,201[1]	5,863	2,655,994	2,162,430	119,605	97,379
1918..	178,675	172,907	17,198,737	16,643,562	13,316	12,886	3,921,336	3,794,755	71,915	69,594
1919..	140,926	156,600	12,117,878	13,465,628	20,700	23,069	3,713,537	4,126,556	27,556	30,621
1920..	61,003	61,552	9,907,626	9,996,795	15,510	15,649	3,327,028	3,356,971	19,190	19,363
1921..	38,084	23,861	9,761,607	6,116,037	33	20	3,350,357	2,099,133	393,092	246,288
1922..	Nil	–	10,811,903	7,300,305	20	14	7,150,937	4,828,384	663,493	447,997
1923..	33,006	21,412	10,540,943	6,838,226	5	3	6,113,327	3,965,899	1,914,438	1,241,953
1924..	83,814	55,972	11,272,567	7,527,933	140	93	8,153,003	5,444,657	226,755	151,429
1925..	214,943	148,451	10,529,131	7,271,944	477	329	8,579,458	5,925,403	904,893	624,946
1926..	375,986	233,513	9,274,965	5,760,402	18	11	10,625,816	6,599,376	2,095,027	1,301,159
1927..	740,864	417,625	9,307,953	5,246,893	12	7	11,040,445	6,223,499	1,647,295	928,580
1928..	908,959	528,796	7,242,601	4,213,456	1,763	1,026	10,943,367	6,366,413	2,839,633	1,651,985
1929..	813,821	431,268	8,890,726	4,711,462	2,644	1,401	10,156,408	5,382,185	3,279,530	1,737,922
1930..	571,164	217,922	10,205,683	3,893,876	94,653	36,114	11,825,930	4,512,065	3,746,326	1,429,373
1931..	530,345	158,414	7,438,951	2,222,014	836,547	249,877	8,061,599	2,408,000	3,694,728	1,103,615
1932..	628,902	199,184	6,335,788	2,006,648	1,036,497	328,275	7,293,462	2,309,958	3,053,188	966,994
1933..	471,419	178,351	4,535,680	1,715,975	1,101,578	416,758	6,737,057	2,548,817	2,227,476	842,717
1934..	470,254	223,187	5,321,160	2,525,470	1,252,920	594,647	8,729,721	4,143,204	553,320	262,611
1935..	668,836	433,338	5,161,651	3,344,229	1,256,454	781,660	9,178,400	5,946,677	201.221	130,371
1936..	724,339	326,872	5,219,366	2,355,343	791,489	357,175	9,748,715	4,399,303	1,100,430	496,591
1937..	908,590	407,784	4,693,047	2,106,286	905,179	406,253	11,530,177	5,174,859	4,091,946	1,836,507
1938[2].	1,189,147	5,170,005	4,323,301	1,879,642	1,198,122	520,907	11,139,724	4,843,218	3,407,450	1,481,457

[1] First recorded production from this province. [2] Preliminary figures.

World Production of Silver.—The world production of silver was estimated by the Director of the United States Mint, as shown in Table 14 of this chapter, p. 339, at 273,873,598 fine oz. for 1937, the highest ever recorded, being an increase of 8·0 p.c. from 1936 and 5·0 p.c. greater than the former maximum produced in 1929. The silver production of Canada in 1937 was 22,977,751 fine oz., or about 8·4 p.c.* of the estimated world total for that year. This placed Canada third, next to Mexico and the United States.

In Table 22 the world production, value, and average price of silver are given for each year from 1860 up to the present. During the period from 1860 to 1872, silver was still a monetary base in parts of the western world and the price remained fairly stable at about $1·32 to $1·35 per fine oz. (about 15½ oz. silver = 1 oz. gold), although production is estimated to have more than doubled during these 12 years. After the demonetization of silver in Germany and the United States, production continued to increase rapidly while the price declined to a generally lower level. During the disturbed conditions of the War period production was curtailed and the price rose to $1·12 per fine oz. in 1919. However, in the period 1922–29 production increased to new records although the price declined to about half that of 1919. In the course of the depression the price declined further by nearly 50 p.c. and production contracted also, but both have tended to recover since 1932. The fact that silver is to a great extent a by-product in the mining of other metals, helps to explain its increasing production, in spite of lower prices, since 1872.

---

* This percentage, based on the world estimate of the Director of the United States Mint, differs slightly from that on p. 317, based on the world estimate of the Imperial Institute.

22.—Quantities and Values of World Production of Silver, with Annual Average Prices, 1860-1937.

(From the Annual Report of the Director of the United States Mint.)

Year.	Quantity.	Value.	Average Price per Fine Oz.[1]	Year.	Quantity.	Value.	Average Price per Fine Oz.[1]	Year.	Quantity.	Value.	Average Price per Fine Oz.[1]
	'000 oz. fine.	$'000.	$		'000 oz. fine.	$'000.	$		'000 oz. fine.	$'000.	$
1860....	29,095	39,337	1·552	1886...	93,297	92,794	0·995	1912...	230,904	141,937[2]	0·615
1861....	35,402	46,191	1·305	1887...	96,124	94,031	0·979	1913...	210,013	126,970[2]	0·604
1862....	35,402	47,651	1·346	1888...	108,828	102,186	0·939	1914...	172,264	95,282[2]	0·553
1863....	35,402	47,616	1·345	1889...	120,214	112,414	0·935	1915...	173,001	88,338[2]	0·511[2]
1864....	35,402	47,616	1·345	1890...	126,095	131,937	1·046	1916...	180,802	121,410[2]	0·672[2]
1865....	35,402	47,368	1·338	1891...	137,170	135,500	0·988	1917...	186,125	156,345[2]	0·839[2]
1866....	43,052	57,646	1·339	1892...	153,152	133,404	0·871	1918...	203,159	200,000[2]	0·985
1867....	43,052	57,173	1·328	1893...	165,473	129,120	0·780	1919...	179,850	201,588	1·121
1868....	43,052	57,086	1·326	1894...	164,610	104,493	0·635	1920...	173,296	176,658	1·019
1869....	43,052	57,043	1·325	1895...	167,501	109,546	0·654	1921...	171,286	108,074[2]	0·631
1870....	43,052	57,173	1·328	1896...	157,061	105,859	0·673	1922...	209,815	158,207[2]	0·754[2]
1871....	63,317	83,958	1·326	1897...	160,421	96,253	0·600	1923...	246,010	172,276	0·700
1872....	63,317	83,705	1·323	1898...	169,055	99,743	0·590	1924...	239,485	178,311	0·744
1873....	63,267	82,121	1·298	1899...	168,337	101,003	0·600	1925...	245,214	172,498	0·703
1874....	55,301	70,674	1·279	1900...	173,591	107,626	0·620	1926...	253,795	159,569	0·629
1875....	62,262	77,578	1·246	1901...	173,011	103,807	0·600	1927...	253,981	144,947	0·570
1876....	67,753	78,323	1·156	1902...	162,763	86,265	0·530	1928...	257,925	151,214	0·586
1877....	62,680	75,279	1·201	1903...	167,689	90,552	0·540	1929...	260,970	139,961	0·536
1878....	73,385	84,540	1·153	1904...	164,195	95,233	0·580	1930...	248,708	96,310	0·387
1879....	74,383	83,533	1·124	1905...	172,318	105,114	0·610	1931...	195,920	56,842	0·290
1880....	74,795	85,641	1·145	1906...	165,054	111,724[2]	0·677	1932...	164,893	46,506	0·282
1881....	79,021	89,926	1·138	1907...	184,207	121,857[2]	0·661[2]	1933...	169,159	59,201	0·350
1882....	86,472	98,232	1·136	1908...	203,131	108,655	0·535	1934...	190,398	91,930	0·483
1883....	89,175	98,984	1·111	1909...	212,149	110,351[2]	0·520	1935...	220,704	142,535	0·646
1884....	81,568	90,785	1·113	1910...	221,716	119,897[2]	0·541[2]	1936...	253,696	115,175	0·454
1885....	91,610	97,519	1·065	1911...	226,193	121,981[2]	0·539[2]	1937[3]..	273,874	123,777	0·452

[1] At the average par price of a fine ounce of silver in London, excepting the years 1918-22, inclusive, and 1931-37, for which the means of the New York bid and asked prices were used. [2] Revised since the publication of the 1938 Year Book. [3] Preliminary figures.

Subsection 10.—Zinc.

The zinc-mining industry of Canada has recently made rapid strides, largely on account of the application of improved metallurgical methods in the treatment of the lead-zinc ores of British Columbia and the production of electrolytic zinc from the Flinflon copper-zinc ores of Manitoba. The growth of production since 1911 is shown in Table **23**.

The principal zinc-mining regions of British Columbia are situated in the Kootenay district, where there are large deposits of silver-lead-zinc ore. The chief producing mine is the Sullivan near Kimberley, while other mines are located in the Ainsworth and Slocan divisions of the West Kootenay district. The Britannia mine on Howe sound, while primarily a copper-gold property, also produces zinc concentrates.

In northwestern Manitoba, the Flin Flon and Sherritt-Gordon mines have ores in which zinc is closely associated with copper and gold, and refined zinc has been made at the Flin Flon smelter since the autumn of 1930. In Quebec, zinc and lead concentrates are produced at the Tetreault mine, Notre-Dame-des-Anges and zinc concentrates were shipped also during 1938 from the Waite-Amulet mine in the Rouyn district. At the Sterling mine, Richmond County, Nova Scotia, the production of lead and zinc concentrates was resumed in 1936. Production by provinces in 1937 is given in Table 5, pp. 324-326.

23.—Quantities[1] and Values of Zinc Produced in Canada, calendar years 1911-38.

Year.	Quantity.[1]	Value.	Average Price per lb.	Year.	Quantity.[1]	Value.	Average Price per lb.
	lb.	$	cts.		lb.	$	cts.
1911	1,877,479	108,105	5·758	1925	109,268,511	8,328,446	7·622
1912	4,283,760	297,421	6·943	1926	149,938,105	11,110,413	7·410
1913	5,640,195	318,558	5·648	1927	165,495,525	10,250,793	6·194
1914	7,246,063	377,737	5·213	1928	184,647,374	10,143,050	5·493
1915	9,771,651	1,292,789	13·230	1929	197,267,087	10,626,778	5·387
1916	23,364,760	2,991,623	12·804	1930	267,643,505	9,635,166	3·600
1917	29,668,764	2,640,817	8·901	1931	237,245,451	6,059,249	2·554
1918	35,083,175	2,862,436	8·159	1932	172,283,558	4,144,454	2·406
1919	32,194,707	2,362,448	7·338	1933	199,131.984	6,393,132	3·211
1920	39,863,912	3,057,961	7·671	1934	298,579,683	9,087,571	3·044
1921	53,089,356	2,471,310	4·655	1935	320,649,859	9,936,908	3·099
1922	56,290,000	3,217,536	5·716	1936	333,182,736	11,045,007	3·315
1923	60,416,240	3,991,701	6·607	1937	370,337,589	18,153,949	4·902
1924	98,909,077	6,274,791	6·344	1938[2]	381,506,588	11,723,697	3·073

[1] Estimated foreign smelter recoveries and refined zinc made in Canada.

[2] Preliminary figures.

Section 5.—Production of Non-Metallic Minerals.

Subsection 1.—Fuels.

COAL.

The fuel situation in Canada is somewhat anomalous, as, in spite of the enormous resources of coal in the country, about 50 p.c. of the consumption is imported. The Canadian coal areas are situated in the eastern and western provinces, while the areas of densest population and greatest industrial development in Ontario and Quebec are more easily and economically supplied with coal from the nearer coalfields of Pennsylvania and Ohio.

Dominion Fuel Board.—The Board was created in 1922 to meet the need for a permanent organization responsible to the Government for a thorough and systematic study of the fuel situation and recurrent shortages experienced throughout Canada. It is composed of permanent members of the Dominion Civil Service and the staff of the Board constitutes a division in the Bureau of Mines and Geology, Department of Mines and Resources. In recent years the policy of the Government has been to extend the market for Canadian coal and to that end financial assistance in the form of subventions has been given to the coal industry since 1928, the Board being responsible for the administration of subvention payments. The amount of coal moved under these assisted rates has increased from 146,126 short tons in 1928 to 2,637,345 tons in 1937. Of the total moved under assisted rates in 1937, 1,908,821 tons were from Nova Scotia and 323,821 tons from Alberta and the Crowsnest district of British Columbia.

Coal Production.—During 1937 there was a further recovery from the low level of 1933. Production was, however, still 9·9 p.c. below that of 1928, the record year. The average price per ton, which had been \$3·63 in 1928, had dropped to \$3·02 in 1933, and was about \$3·08 in 1937. Nova Scotia was again the leading producer. The coal produced in Nova Scotia, New Brunswick, British Columbia, and Yukon is all classed as bituminous, while Alberta produces bituminous, sub-bituminous, and lignite, and Saskatchewan and Manitoba lignite only. The division of the 1937 production among these classes is given in Table 28.

24.—Production of Coal in Canada, by Provinces, calendar years 1911-38.

Note.—For annual production from 1874-1910, by provinces, see 1911 Year Book, p. 419.

Year.	Nova Scotia.	New Brunswick.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Totals.	
								Quantity.	Value.
	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.	$
1911....	7,004,420	55,781	–	206,779	1,511,036	2,542,532	2,840	11,323,388	26,467,646
1912....	7,783,888	44,780	–	225,342	3,240,577	3,208,997	9,245	14,512,829	36,019,044
1913....	7,980,073	70,311	–	212,897	4,014,755	2,714,420	19,722	15,012,178	37,334,940
1914....	7,370,924	98,049	–	232,299	3,683,015	2,239,799	13,443	13,637,529	33,471,801
1915....	7,463,370	127,391	–	240,107	3,360,818	2,065,613	9,724	13,267,023	32,111,182
1916....	6,912,140	143,540	–	281,300	4,559,054	2,584,061	3,300	14,483,395	38,817,481
1917....	6,327,091	189,095	–	355,445	4,736,368	2,433,888	4,872	14,046,759	43,199,831
1918....	5,818,562	268,212	–	346,847	5,972,816	2,568,589	2,900	14,977,926	55,192,896
1919....	5,790,196	166,377	–	379,347	4,933,660	2,649,516	Nil	13,919,096	55,622,670
1920....	6,437,156	171,610	–	335,222	6,907,765	3,095,011	"	16,946,764	82,496,538
1921....	5,734,928	187,192	–	335,632	5,909,217	2,890,291	233	15,057,493	72,451,656
1922....	5,569,072	287,513	–	382,437	5,990,911	2,927,033	465	15,157,431	65,518,497
1923....	6,597,838	276,617	–	438,100	6,854,397	2,823,306	313	16,990,571	72,058,986
1924....	5,557,441	217,121	–	479,118	5,189,729	2,193,667	1,121	13,638,197	53,593,988
1925....	3,842,978	208,012	–	471,965	5,869,031	2,742,252	730	13,134,968	49,261,951
1926....	6,747,477	173,111	–	439,803	6,503,705	2,613,719	316	16,478,131	59,875,094
1927....	7,071,876	203,950	–	470,216	6,934,162	2,746,243	414	17,426,861	61,867,463
1928....	6,743,504	207,738	–	471,713	7,336,330	2,804,594	414	17,564,293	63,757,833
1929....	7,056,133	218,706	–	580,189	7,150,693	2,490,378	458	17,496,557	63,065,170
1930....	6,252,552	209,349	–	579,424	5,755,528	2,083,818	653	14,881,324	52,849,748
1931....	4,955,563	182,181	1,306[1]	662,836	4,564,015	1,876,406	904	12,243,211	41,207,682
1932....	4,084,581	212,695	1,552	887,139	4,870,648	1,681,490	808	11,738,913	37,117,695
1933....	4,557,590	312,303	3,880	927,649	4,718,788	1,382,272	862	11,903,344	35,923,962
1934....	6,341,625	314,750	4,113	909,288	4,753,810	1,485,969	638	13,810,193	42,045,942
1935....	5,822,075	346,024	3,106	921,785	5,462,894	1,331,287	835	13,888,006	41,963,110
1936....	6,649,102	368,618	4,029	1,020,792	5,696,960	1,489,171	510	15,229,182	45,791,934
1937....	7,256,954	364,714	3,172	1,049,348	5,562,839	1,598,843	84	15,835,954	48,752,048
1938[2]...	6,231,923	329,030	2,365	1,017,128	5,227,051	1,440,286	Nil	14,247,783	43,912,204

[1] First reported production from Manitoba.

[2] Preliminary figures.

25.—Imports into Canada of Anthracite, Bituminous, and Lignite Coal for Home Consumption, calendar years 1911-38.

NOTE.—Anthracite dust is included under anthracite coal. For previous years, see 1911 Year Book, p. 420.

Year.	Anthracite.		Bituminous.		Lignite.		Totals.	
	short tons.	$	short tons.	$	short tons.	$	short tons.	$
1911	4,020,577	18,794,192	10,538,315	20,498,399	–	–	14,558,892	39,292,591
1912	4,184,017	20,080,388	10,411,793	19,397,649	–	–	14,595,810	39,478,037
1913	4,642,057	22,034,839	13,559,896	25,914,280	–	–	18,201,953	47,949,119
1914	4,435,010	21,241,924	10,286,047	18,559,574	–	–	14,721,057	39,801,498
1915	4,072,192	18,753,980	8,393,710	9,591,625	–	–	12,465,902	28,345,605
1916	4,570,815	22,216,363	13,009,788	16,073,303	–	–	17,580,603	38,289,666
1917	5,320,198	28,109,586	15,537,262	42,452,771	–	–	20,857,460	70,562,357
1918	4,785,160	26,007,888	16,893,427	45,642,696	–	–	21,678,587	71,650,584
1919	4,937,095	31,595,694	12,356,162	29,565,105	–	–	17,293,257	61,160,799
1920	4,982,313	36,773,351	13,861,229	61,260,247	–	–	18,843,542	98,033,598
1921	4,553,820	40,293,639	13,748,242	48,631,095	–	–	18,302,062	88,924,734
1922	2,705,752	23,795,143	10,317,773	37,387,285	–	–	13,023,525	61,182,428
1923	5,165,382	46,457,962	15,822,240	49,899,099	2,331[1]	12,846	20,989,953	96,369,907
1924	4,152,558	37,280,910	12,546,214	29,628,643	26,007	117,955	16,724,779	67,027,508
1925	3,782,557	32,096,509	12,548,460	26,974,340	18,653	87,832	16,349,670	59,158,681
1926	4,192,419	34,202,166	12,376,606	25,511,932	10,423	45,567	16,579,448	59,759,665
1927	4,107,854	31,282,371	14,568,671	30,457,884	10,829	44,254	18,687,354	61,784,509
1928	3,748,816	27,680,018	13,445,945	26,608,427	10,780	44,247	17,205,541	54,332,692
1929	4,019,917	28,809,792	14,170,138	27,140,968	14,108	62,508	18,204,163	56,013,268
1930	4,256,090	30,098,910	14,497,955	26,522,765	18,676	72,691	18,772,721	56,694,366
1931	3,162,317	21,067,025	9,952,280	15,732,710	6,410	29,603	13,121,007	36,829,338
1932	3,148,902	19,312,710	8,807,131	12,011,398	3,004	13,701	11,959,037	31,337,809
1933	3,015,571	17,610,091	8,185,759	10,501,924	2,707	10,176	11,204,037	28,122,191
1934	3,500,563	18,414,060	9,471,605	16,641,659	2,791	9,661	12,974,959	35,065,380
1935	3,442,835	17,445,102	8,630,686	15,867,107	5,246	19,040	12,078,767	33,331,249
1936	3,418,556	17,897,635	9,700,002	17,039,408	4,873	18,347	13,123,431	34,955,390
1937	3,488,278	17,317,449	11,180,827	20,835,587	1,494	5,582	14,670,599	38,158,618
1938	3,475,801	18,079,657	9,533,729	17,734,567	2,961	11,690	13,012,491	35,825,914

[1] First reported importation.

26.—Exports of Coal, the Produce of Canada, calendar years 1911-38.

NOTE.—For previous years, see 1911 Year Book, p. 421.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	short tons.	$		short tons.	$
1911	1,500,639	[1]	1925	785,910	4,329,173
1912	2,127,133	[1]	1926	1,028,200	5,739,436
1913	1,562,020	3,951,351	1927	1,113,330	5,890,259
1914	1,423,126	3,780,175	1928	863,941	4,469,999
1915	1,766,543	5,406,058	1929	842,972	4,375,328
1916	2,135,359	7,099,387	1930	624,512	3,345,998
1917	1,733,156	7,387,192	1931	359,853	1,909,922
1918	1,817,195	9,405,423	1932	285,487	1,433,036
1919	2,070,050	12,438,885	1933	259,233	1,188,225
1920	2,558,174	18,014,899	1934	306,335	1,400,978
1921	1,987,251	13,896,370	1935	418,391	1,906,647
1922	1,818,582	11,159,060	1936	411,574	1,792,584
1923	1,654,406	10,661,399	1937	355,268	1,441,879
1924	773,246	4,836,848	1938	353,181	1,540,990

[1] Not available.

Coal Consumption.—The sources of coal consumed in Canada in the calendar years 1911-37 are shown in Table 27, detailed figures of coal *made available for consumption* during 1937 are given in Table 28; the difference between the totals of the two tables in the same year is accounted for by the fact that coal received may be held in bond at Canadian ports and not "cleared for consumption" until required, while coal received in previous years may be taken out of bond (cleared for consumption) in a later year. Normally, the coal made available for consumption is greater than the apparent domestic consumption, since coal is landed at Canadian ports and re-exported or ex-warehoused for ships' stores without being taken out of bond, but while remaining in bond at the port it is available for domestic consumption if required.

27.—Annual Consumption of Canadian and Imported Coal in Canada, by Quantities and Percentages, calendar years 1911-37.

NOTE.—For the years 1886-1910, see 1921 Year Book, p. 354.

Calendar Year.	Canadian Coal.[1]		Imported Coal "Entered for Consumption".				Grand Total.	Per Capita.[3]
			From U.S.A.	From United Kingdom.	Total.[2]			
	short tons.	p.c.	short tons.	short tons.	short tons.	p.c.	short tons.	short tons.
1911	9,822,749	40·5	14,510,129	48,963	14,424,949	59·5	24,247,698	3·364
1912	12,385,696	46·0	14,557,124	38,668	14,549,104	54·0	26,934,800	3·645
1913	13,450,158	42·6	18,145,769	37,825	18,132,387	57·4	31,582,545	4·138
1914	12,214,403	45·5	14,687,853	33,101	14,637,920	54·5	26,852,323	3·408
1915	11,500,480	48·1	12,450,796	15,098	12,406,212	51·9	23,906,692	2·995
1916	12,348,036	41·3	17,576,202	4,401	17,517,820	58·7	29,865,856	3·733
1917	12,313,603	37·2	20,848,009	9,451	20,810,132	62·8	33,123,735	4·110
1918	13,160,731	37·8	21,674,826	3,761	21,611,101	62·2	34,771,832	4·268
1919	11,611,168	40·3	17,292,913	344	17,236,269	59·7	28,847,437	3·471
1920	14,025,566	42·9	18,752,981	Nil	18,668,741	57·1	32,694,307	3·821
1921	12,715,734	41·1	18,300,081	1,591	18,258,387	58·9	30,974,121	3·525
1922	13,044,352	50·2	12,255,555	765,980	12,962,189	49·8	26,006,541	2·916
1923	15,070,962	41·8	20,417,239	572,570	20,967,971	58·2	36,038,933	4·000
1924	12,529,358	42·8	16,405,344	317,112	16,714,143	57·2	29,243,501	3·198
1925	12,125,290	42·6	15,744,957	604,117	16,331,971	57·4	28,457,261	3·062
1926	15,086,296	47·7	16,204,405	287,299	16,565,555	52·3	31,651,851	3·349
1927	15,944,983	46·7	17,266,434	907,220	18,177,303	53·3	34,122,286	3·541
1928	16,487,807	50·0	15,830,688	682,755	16,515,582	50·0	33,003,389	3·356
1929	16,387,461	48·0	16,780,452	843,502	17,724,132	52·0	34,111,593	3·401
1930	14,052,671	43·3	16,971,933	1,144,861	18,412,039	56·7	32,464,710	3·180
1931	11,682,779	47·7	11,793,798	987,442	12,828,327	52·3	24,511,106	2·362
1932	11,212,701	49·0	9,889,866	1,727,716	11,654,492	51·0	22,867,193	2·177
1933	11,456,273	51·5	8,865,935	1,942,875	10,808,962	48·5	22,265,235	2·085
1934	13,236,406	51·1	10,580,710	1,981,116	12,651,168	48·9	25,887,574	2·392
1935	13,306,303	53·1	9,618,518	1,822,500	11,735,835	46·9	25,042,138	2·290
1936	14,508,642	53·3	10,801,643	1,498,656	12,719,515	46·7	27,228,167	2·469
1937	15,172,729	51·5	12,574,574	1,211,052	14,268,585	48·5	29,441,314	2·648

[1] The sum of Canadian coal mines' sales, colliery consumption, coal supplied to employees, and coal used in making coke, etc., less the tonnage of coal exported. [2] Includes small tonnages from countries other than the United Kingdom and the United States. Deductions have been made from this column to take account of foreign coal re-exported from Canada and bituminous coal ex-warehoused for ships' stores. [3] Figures based on estimates of population given on p. 113.

28.—Coal Output, Exports, Receipts from Other Countries, and Coal Made Available for Consumption in Canada during 1937.

NOTE.—For details by provinces, see the Bureau's annual report, "Coal Statistics for Canada".

Grade of Coal.	Canadian Coal.		Receipts from U.S.A.	Receipts from United Kingdom.	Receipts from Other Countries.	Coal Made Available for Consumption.
	Output.	Exported.				
	short tons.	short tons.	short tons.	short tons.	short tons.	short tons.
Anthracite	Nil	Nil	1,994,619	1,134,855	442,794	3,572,268
Bituminous	11,634,379	345,426	12,338,938	56,073	54,374	23,738,338
Sub-bituminous	506,260	Nil	Nil	Nil	Nil	506,260
Lignite	3,695,315	9,842	1,494	"	"	3,686,967
Totals	**15,835,954**	**355,268**	**14,335,051**	**1,190,928**	**497,168**[1]	**31,503,833**

[1] Includes 327,757 tons from Germany, 160,889 tons from Russia, 8,131 tons from Belgium, and 391 tons from other countries.

World Production.—The total estimated coal production of the world in 1937 amounted to about 1,510,000,000 long tons, an increase of 6·3 p.c. over the estimate for the previous year. Canada contributed 14,139,244 long tons or about 1·0 p.c. Table 29 shows the production of the British Empire and the chief foreign countries in units of 1,000 long tons during each of the years 1913 and 1921-37.

29.—Coal Produced in the Principal Countries of the World, 1913, 1921-37.

Note.—For corresponding figures for 1914-20, see 1932 Year Book, p. 281. Figures in this table, except as indicated, are from the Imperial Institute's Statistical Summary.

BRITISH EMPIRE.

Calendar Year.	United Kingdom.	British India.	Canada.[1]	Australia.	New Zealand.	Union of South Africa.
	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.
1913	287,431	16,208	13,404	12,418	1,888	9,583
1921	163,251	19,303	13,444	12,878	1,809	10,645
1922	249,607	19,011	13,533	12,299	1,585	9,126
1923	276,001	19,658	15,170	12,634	1,970	11,075
1924	267,118	21,174	12,180	13,885	2,083	11,633
1925	243,176	20,904	11,723	14,503	2,115	12,127
1926	126,279	20,093	14,694	14,208	2,240	12,745
1927	251,232	22,082	15,560	14,978	2,367	12,382
1928	237,763	22,543	15,683	13,432	2,437	12,408
1929	257,907	23,419	15,622	12,106	2,536	12,813
1930	243,882	23,803	13,287	11,363	2,542	12,030
1931	219,459	21,716	10,931	10,595	2,158	10,709
1932	208,733	20,153	10,481	11,157	1,842	9,764
1933	207,112	20,284	10,628	11,672	1,821	10,545
1934	220,728	22,608	12,331	12,418	2,060	12,002
1935	222,252	23,592	12,400	13,109	2,115	13,360
1936	228,454	23,176	13,597	14,415	2,140	14,607
1937[2]	240,411	25,036	14,139	13,577	2,278	15,246

FOREIGN COUNTRIES.

Calendar Year.	Saar.	Germany.	Belgium.	France.	Czechoslovakia.	Poland.	Netherlands.	Japan.	United States.
	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.	'000 long tons.
1913	[3]	274,264	22,474	40,188	[4]	[4]	1,843	20,973	508,893
1921	[5]	255,148	21,401	37,916	32,174	7,717	3,978	25,944	452,139
1922	[5]	262,878	20,868	43,118	28,385	24,300	4,525	27,420	425,849
1923	[5]	178,191	22,554	46,981	27,380	35,686	5,249	28,633	587,407
1924	[5]	239,494	22,986	58,065	35,066	31,793	5,975	29,801	510,369
1925	12,785	267,970	22,726	47,249	30,663	28,677	6,943	31,121	519,527
1926	13,465	280,656	24,913	51,607	32,491	35,139	8,677	31,089	591,720
1927	13,381	299,511	27,130	52,021	33,106	37,560	9,374	33,177	535,625
1928	12,900	312,092	27,108	51,601	34,459	40,047	10,941	33,445	514,369
1929	13,365	332,560	26,514	54,109	38,465	45,686	11,552	34,479	541,232
1930	13,027	284,148	26,982	54,163	33,098	36,968	12,160	31,007	479,385
1931	11,187	247,971	26,615	51,280	30,544	37,699	12,818	27,661	394,406
1932	10,273	223,796	21,075	46,511	26,394	28,412	12,677	27,717	321,040
1933	10,394	232,752	24,900	47,223	25,191	26,957	12,471	32,999	342,118
1934	11,139	257,990	25,972	47,889	25,451	28,797	12,237	36,658	371,907
1935	[3]	287,445	26,087	46,375	25,769	28,110	11,775	34,354	379,046
1936	[3]	314,631	27,427	45,418	27,737	29,291	12,688	37,466	440,774
1937[2]	[3]	363,705	29,213	44,618	34,440	35,665	14,236	[6]	441,350

---

[1] Dominion Bureau of Statistics figures. [2] Preliminary figures. [3] Included with Germany. [4] Not separately reported. [5] Included with France. [6] Data not available.

NATURAL GAS AND PETROLEUM.

Natural Gas.—The producing wells in Eastern Canada are in southwestern Ontario, and near Moncton, N.B. The principal producing fields in Alberta are the Turner Valley (about 35 miles southwest of Calgary), Medicine Hat, Viking (about 80 miles southeast of Edmonton), Redcliff, Foremost, Bow Island, and Wetaskiwin. Wainwright is supplied with gas from the Maple Leaf well in the Fabyan field. Near Lloydminster, in Saskatchewan, a well was brought into production during 1934 and is now supplying that town with gas. In 1937, Ontario was credited with about 56 p.c. of the total value but only 33 p.c. of the total quantity, while Alberta produced 41 p.c. by value and 65 p.c. of the total quantity. The production by provinces since 1920 is given in Table **30**.

30.—Quantities and Values of Natural Gas Produced in Canada, by Provinces, calendar years 1920-38.

Note.—For the years 1892-1919, see "Mineral Production of Canada", 1928, p. 188.

Year.	New Brunswick.		Ontario.		Alberta.		Canada.[1]	
	M cu. ft.	$	M cu. ft.	$	M cu. ft.	$	M cu. ft.	$
1920	682,502	130,506	10,529,374	2,920,731	5,633,442	1,181,345	16,845,518	4,232,642
1921	708,743	139,375	8,422,774	3,080,130	4,945,884	1,374,599	14,077,601	4,594,164
1922	753,898	148,040	8,060,114	4,076,296	5,868,439	1,622,105	14,682,651	5,846,501
1923	640,300	126,068	8,128,413	4,066,244	7,191,670	1,692,246	15,960,583	5,884,618
1924	599,972	113,577	7,150,078	3,798,381	7,131,080	1,796,618	14,881,336	5,708,636
1925	639,235	122,394	7,143,962	3,958,006	9,119,500	2,752,545	16,902,897	6,833,005
1926	648,316	128,300	7,764,996	4,409,593	10,794,697	3,019,221	19,208,209	7,557,174
1927	630,755	124,637	7,311,215	4,331,780	13,434,621	3,586,533	21,376,791	8,043,010
1928	660,981	324,344	7,632,800	4,535,312	14,288,605	3,754,466	22,582,586	8,614,182
1929	678,456	333,002	8,586,475	4,959,695	19,112,931	4,684,247	28,378,462	9,977,124
1930	661,975	325,751	7,965,761	5,034,828	20,748,583	4,929,226	29,376,919	10,289,985
1931	655,891	323,184	7,419,534	4,635,497	17,798.698	4,067,893	25,874,723	9,026,754
1932	662,452	326,191	7,386,154	4,719,297	15,370,968	3,853,794	23,420,174	8,899,462
1933	618,033	302,706	7,166,659	4,523,085	15,352,811	3,886,263	23,138,103	8,712,234
1934	623,601	306,005	7,682,851	4,741,368	14,841,491	3,707,276	23,162,324	8,759,652
1935	615,454	303,886	8,158,825	4,938,084	16,060,349	4,113,436	24,910,786	9,363,141
1936	606,246	298,819	10,006,743	6,052,294	17,407,820	4,376,720	28,113,348	10,762,243
1937	576,671	283,922	10,746,334	6,588,798	20,955,506	4,766,437	32,380,991	11,674,802
1938[2]	577,492	284,000	10,973,125	6,583,875	21,800,000	4,948,600	33,441,139	11,847,803

[1] Totals for Canada include small productions in Manitoba, Saskatchewan, and Northwest Territories.
[2] Preliminary figures.

Petroleum.—The Turner Valley field in Alberta is the principal source of production in Canada. The earlier wells in this field give a wet gas from which a very high grade of crude naphtha and casinghead gasoline is obtained. However, in June, 1936, a well on the west flank of the southern end of the Turner Valley field, was brought into production with a heavier grade (44° A.P.I.) of crude oil than that formerly derived from the Turner Valley. The successful completion of this well resulted in much drilling activity on the west flank of the field and other producing wells were completed. Furthermore, the flow of oil was greatly increased by acidation of a number of these wells. Near the end of 1938, a crude well was brought into production nearly 2 miles to the northwest of any previously producing well in the Turner Valley and 17 miles from the most southerly wells of the field. Under present circumstances, the available market being largely localized by high transportation costs, and subject to serious seasonal curtailment in winter, production is under stringent proration regulation and therefore the actual rate of production is much below the potential rate of the wells presently producing, while many new wells are still being drilled, and the limits of the field are by no means yet determined. These developments appear to forecast a major oil field in the Turner Valley of Alberta, the potentialities and probable life of which may warrant the capital outlay for pipe-line facilities in order to reach more distant and larger consuming markets.

The Red Coulee field in southern Alberta, near the International Boundary, began to yield some petroleum in 1929, while a small production has been obtained for a number of years in the Wainwright field, about 120 miles east of Edmonton. Production from wells near Fort Norman on the lower Mackenzie river increased from 910 barrels in 1932 to 11,371 barrels in 1937. This oil is treated locally in a small refining plant and is used to a large extent in connection with mining operations and transportation in the lower Mackenzie River and Great Bear Lake region.

The principal Ontario oil fields are situated in the southwestern peninsula between lake Huron and lake Erie. The maximum production of these fields was reached in the '90's and has since declined. New Brunswick's small production comes from the Stony Creek field, near Moncton. For the production by provinces in 1937, see Table 5, pp. 324-326.

31.—Quantities and Values of Crude Petroleum Produced in Canada, calendar years 1911-38.

NOTE.—For figures for the years 1886–1910, inclusive, see p. 377 of the 1933 Year Book.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	bbl.[1]	$		bbl.[1]	$		bbl.[1]	$
1911.....	291,092	357,073	1920....	196,251	822,235	1929....	1,117,368	3,731,764
1912.....	243,336	345,050	1921....	187,541	641,533	1930....	1,522,220	5,033,820
1913.....	228,080	406,439	1922....	179,068	611,176	1931....	1,542,573	4,211,674
1914.....	214,805	343,124	1923....	170,169	522,018	1932....	1,044,412	3,022,592
1915.....	215,464	300,572	1924....	160,773	467,400	1933....	1,145,333	3,138,791
1916.....	198,123	392,284	1925....	332,001	1,250,705	1934....	1,410,895	3,449,162
1917.....	213,832	542,239	1926....	364,444	1,311,665	1935....	1,446,620	3,492,188
1918.....	304,741	885,143	1927....	476,591	1,516,043	1936....	1,500,374	3,421,767
1919.....	240,466	736,324	1928....	624,184	2,035,300	1937....	2,943,750	5,399,353
						1938[2]...	6,956,229	11,826,594

[1] The barrel=35 imperial gallons. [2] Preliminary figures.

Subsection 2.—Other Non-Metallic Minerals.

Asbestos.—Canada produces more asbestos than any other country. The value of the annual output of asbestos increased from less than $25,000 in 1880 to $14,792,201 in 1920 and $13,172,581 in 1929. Owing to trade depression, production was much curtailed from 1929 to 1932, as will be seen in Table 32. However, since 1932, production has shown a distinct improvement. The Imperial Institute's estimate for the world total of asbestos production in 1936 is 503,000 long tons. In 1936 Canada produced more than half the world total (about 54 p.c.) while other leading countries with their production in long tons were: Russia, 123,141; Southern Rhodesia, 50,309; Union of South Africa, 21,812; United States, 9,754; and Cyprus, 9,202. Russian production in 1937 was not available at the time of going to press but increases were reported in nearly all other producing countries.

The Eastern Townships of Quebec have for many years been the most productive asbestos-mining area in the world. The most important deposits are: at Black Lake, in Coleraine township; at Thetford and Robertsonville, in Thetford township; at East Broughton, in Broughton township; and at Danville, in Shipton township. The veins of chrysotile asbestos vary in width from ¼ inch to ½ inch and occasionally fibre has been obtained several inches in length. The fibre is of good quality and well adapted for spinning. Both open-cut and underground methods of mining are employed throughout the Canadian asbestos fields. Nearly all the mining companies have installed machinery for the crushing, fibrizing, screening, and grading of the mine product. Some development work has been conducted on an asbestos property at Rahn lake, Bannockburn township, Ontario; the fibre in this deposit is reported as being of high quality.

There are 13 plants in Canada which manufacture asbestos products, including the following commodities: asbestos paper and mill board; asbestos roofing of all kinds; asbestos rigid shingles; asbestos building materials; asbestos cellular and sponge-felted pipe insulation; insulating sheets and blocks; asbestos yarn; asbestos dryer felts; asbestos brake linings and clutch facings (woven on special looms); and asbestos packings for steam, oil, and hydraulic operations.

32.—Quantities and Values of Asbestos Produced in Canada, calendar years 1911-38.

Note.—Figures for the years 1896-1910 are given in the 1911 Year Book, p. 424.

Year.	Quantity.	Value.	Year.	Quantity.	Value.	Year.	Quantity.	Value.
	short tons.	$		short tons.	$		short tons.	$
1911.....	127,414	2,943,108	1921....	92,761	4,906,230	1930....	242,114	8,390,163
1912.....	136,301	3,137,279	1922....	163,706	5,552,723	1931....	164,296	4,812,886
1913.....	161,086	3,849,925	1923....	231,482	7,522,506	1932....	122,977	3,039,721
1914.....	117,573	2,909,806	1924....	225,744	6,710,830	1933....	158,367	5,211,177
1915.....	136,842	3,574,985				1934....	155,980	4,936,326
1916.....	154,149	5,228,869	1925[1]...	273,524	8,977,546			
1917.....	153,781	7,230,383	1926....	279,403	10,099,423	1935....	210,467	7,054,614
1918.....	158,259	8,970,797	1927....	274,778	10,621,013	1936....	301,287	9,958,183
1919.....	159,236	10,975,369	1928....	273,033	11,238,360	1937....	410,026	14,505,791
1920.....	199,573	14,792,201	1929....	306,055	13,172,581	1938[2]...	289,877	12,893,806

[1] The quantities and values of sand, gravel, and rock separated as a by-product in milling asbestos are included in the totals for 1924 and previous years, but are excluded in later years. [2] Preliminary figures.

Gypsum.—Many large deposits of gypsum occur throughout Canada, but the production is chiefly from Hants, Inverness, and Victoria Counties, Nova Scotia; Hillsborough, New Brunswick; Hagersville and Caledonia, Ontario; Gypsumville and Amaranth, Manitoba; and Falkland, British Columbia. The Hillsborough deposit of gypsum in New Brunswick is of very high grade. The greater part of Canada's production is exported in crude form from the Nova Scotia deposits, which are conveniently situated for ocean shipping and during recent years account for about 80 p.c. of the total Canadian production. Production of gypsum in Canada reached its highest point in 1928 with 1,246,368 tons valued at $3,743,648. Production during 1937 was 1,047,187 tons valued at $1,540,483, and preliminary figures for 1938 are 1,019,188 tons valued at $1,517,070. The production by provinces during 1937 is shown in Table 5, pp. 324-326.

Salt.—The greater part of the Canadian salt production comes from wells located in southwestern Ontario, but the Malagash deposits in Nova Scotia have shown an increasing production in recent years. The first production of commercial importance in Manitoba was recorded in 1932 and for Saskatchewan in 1933, while some commercial shipments have been made from deposits near McMurray in Alberta.

An important part of Canadian salt production (45 p.c. in 1937) is used in the form of brine in chemical industries for the manufacture of caustic soda, liquid chlorine and other chemicals.

The Canadian production during the present century has shown fairly steady growth from 59,428 tons in 1901 to 91,582 in 1911, 164,658 in 1921, 262,547 in 1926 and a record at that time of 330,264 tons in 1929. Production declined to 259,047 tons in 1931 but has since recovered to 458,957 tons valued at $1,799,465 in 1937. (See Tables **2** and **5** pp. 319 and 324.) The estimate for 1938 is 467,408 tons, valued at $1,941,585.

Section 6.—Production of Clay Products and Other Structural Materials.

Production of these materials is naturally dependent upon the activity of the construction industry in Canada. Building and construction work fluctuates widely with business cycles and during the recent depression dropped to a very low ebb. Under these circumstances, the production of clay products, cement, gravel, and stone was severely curtailed. Some uncompleted large engineering construction operations and governmental relief projects eased the decline in the early years of the depression but the downward trend was still evident in 1933. With a slight recovery of construction activities since then (see Chapter XV) there has been a moderate increase in the production of the chief structural materials, the total reported value of production being $34,869,699 in 1937 as compared with $16,696,687 in 1933.

Brick and Tile.—Although the brick and tile industry is established in every province of the Dominion, production is naturally greatest near the chief centres of population, that is, in Ontario and Quebec. Production fluctuates with building activity and reached its highest point in the year 1912. Since that time the gradual substitution of steel and reinforced concrete for brick has reduced the production of brick so that, while the value of construction undertaken in 1928 or 1929 is estimated to have exceeded that of 1912, the quantity of brick produced in the later years was only about half that of 1912. On the other hand, as will be seen from Table **33**, the production and consumption of cement in 1929 greatly exceeded that of 1912 or 1913. The production of building brick of various types in 1936 and 1937 is shown in Table **2** of this chapter, while the production by provinces in 1937 is given in Table **5**. The estimated value of all clay products made in 1938 was $4,437,086.

Cement.—The cement industry in Canada began with the manufacture of hydraulic or natural rock cement. The first production was probably at Hull, Quebec, between 1830 and 1840. The manufacture of Portland cement began about 1889. Owing to its superiority in uniformity and strength, it soon superseded the older product. Portland cement consists of an accurately proportioned mixture of lime, silica, and alumina. The lime is usually furnished by limestone and the silica and alumina by clay or shale. The cement industry has naturally become established where these materials are situated and where fuel supplies and transportation are readily available. The largest production is in Quebec and Ontario, although there are also active plants in Manitoba, Alberta, and British

Columbia. As may be seen from Table 33, production declined greatly from 1929 to 1933, but has recovered somewhat since then. Production by provinces in 1937 is given in Table 5, pp. 324-326.

33.—Production,[1] Imports, Exports, and Apparent Consumption of Portland Cement, by Quantities and Values, calendar years 1910-38.

Year.	Production.[1]		Imports.		Exports.		Apparent Consumption.	
	bbl.[2]	$	bbl.[2]	$	bbl.[2]	$	bbl.[2]	$
1910.......	4,753,975	6,412,215	349,415	468,395	[3]	12,914	5,103,285	6,867,696
1911.......	5,692,915	7,644,537	669,532	840,986	[3]	4,067	6,354,831	8,481,456
1912.......	7,132,732	9,106,556	1,434,413	1,969,529	[3]	2,436	8,567,145	11,073,649
1913.......	8,658,805	11,019,418	254,093	409,303	[3]	1,736	8,912,898	11,426,985
1914.......	7,172,480	9,187,924	98,022	147,158	[3]	2,223	7,270,502	9,332,859
1915.......	5,681,032	6,977,024	28,190	40,426	[3]	5,161	5,709,222	7,012,289
1916.......	5,369,560	6,547,728	20,596	31,621	[3]	2,424	5,390,156	6,576,925
1917.......	4,768,488	7,724,246	8,580	19,646	[3]	16,857	4,777,068	7,727,035
1918.......	3,591,481	7,076,503	5,913	19,851	[3]	13,752	3,597,394	7,082,602
1919.......	4,995,257	9,802,433	14,066	51,314	177,506	465,954	4,831,817	9,387,793
1920.......	6,651,980	14,798,070	32,963	112,466	835,667	2,193,626	5,849,276	12,716,910
1921.......	5,752,885	14,195,143	12,057	75,670	242,345	650,658	5,522,597	13,620,155
1922.......	6,943,972	15,438,481	30,914	83,037	425,137	699,738	6,549,749	14,821,780
1923.......	7,543,589	15,064,661	17,697	75,294	493,751	824,811	7,067,535	14,315,144
1924.......	7,498,624	13,398,411	27,672	69,320	153,520	213,845	7,372,776	13,253,886
1925.......	8,116,597	14,046,704	21,849	63,067	997,915	1,498,495	7,140,531	12,611,276
1926.......	8,707,021	13,013,283	21,114	77,866	285,932	358,231	8,442,203	12,732,918
1927.......	10,065,865	14,391,937	19,354	87,541	249,694	308,144	9,835,525	14,171,334
1928.......	11,023,928	16,739,163	34,047	146,164	267,325	340,624	10,790,650	16,544,703
1929.......	12,284,081	19,337,235	55,980	189,169	234,111	252,955	12,105,950	19,273,449
1930.......	11,032,538	17,713,067	143,436	569,848	198,736	212,071	10,977,238	18,070,844
1931.......	10,161,658	15,826,243	38,392	143,491	114,064	124,267	10,085,986	15,845,467
1932.......	4,498,721	6,930,721	21,351	58,092	53,333	38,921	4,466,739	6,949,892
1933.......	3,007,432	4,536,935	19,119	37,768	52,531	47,369	2,974,020	4,527,334
1934.......	3,783,226	5,667,946	14,341	45,548	70,046	55,181	3,727,521	5,658,313
1935.......	3,648,086	5,580.043	17,738	60,079	55,607	44,365	3,610,217	5,595,757
1936.......	4,508,718	6,908,192	39,867	107,180	68,929	56,909	4,479.656	6,958,463
1937.......	6,168,971	9,095,867	61,082	134,113	72,568	82,978	6,157,485	9,147,002
1938[4]......	5,519,102	8,241,350	48,497	105,326	89,419	101,059	5,478,180	8,245,617

[1] 'Production' as used here means quantity and value of *sales*. [2] The barrel of cement=350 lb. or 3½ cwt. [3] Not available. [4] Preliminary figures.

Sand and Gravel, and Stone.—The Mining, Metallurgical, and Chemical Branch of the Bureau of Statistics presents details of production and organization of the stone industry separately from that of sand and gravel, but for the sake of brevity they are here discussed together. However, the figures of stone production shown do not include the limestone used to produce lime and cement, nor the quartz and other rock minerals, which are shown separately in Table 2, pp. 319-320. Production of these materials increased greatly up to the recent world depression. The expansion in the stone industry was chiefly in crushed stone. Thus a production of crushed stone in 1922 of 3,044,399 tons had increased by 1930 to 8,062,330 tons, while in the same period the production of sand and gravel increased from 11,666,374 tons to 28,547,511 tons. During the depression the output contracted sharply, but since 1933 there has been some recovery. Among the developments in Canada that resulted in increased production of these materials prior to the depression may be mentioned: (1) the tendency for brick to be replaced by reinforced concrete, cement blocks, etc., as indicated on p. 355 by a decline in brick production and an increase in that of cement; (2) the extensive improvement during that period in the mileage and character of roads and highways in Canada; and (3) the improvement of railway roadbeds.

The provincial distribution of the 1937 production of sand and gravel, and stone, is shown in Table 5, p. 324, while the chief purposes for which these materials were produced are shown in Table 34.

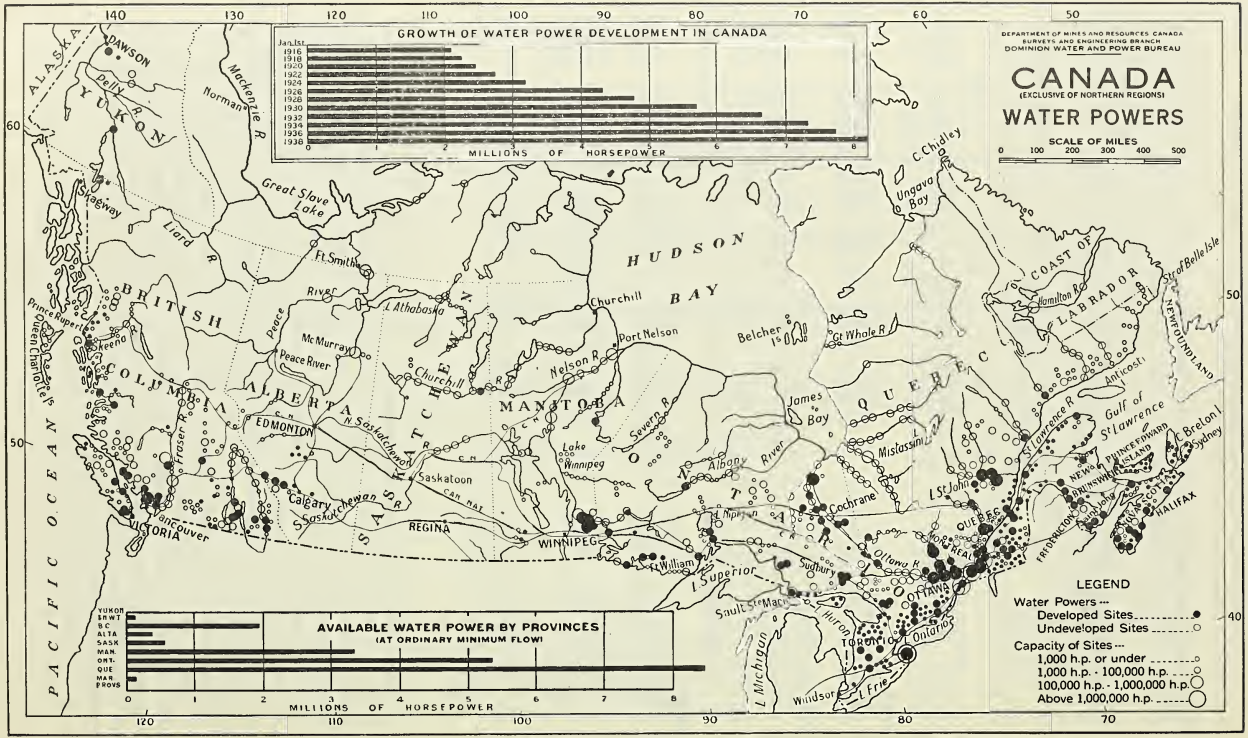
34.—Production of Sand and Gravel, and Stone in Canada, by Principal Purposes, calendar years 1935-37.

Material and Purpose.	1935.		1936.		1937.	
	Quantity.	Gross Value.	Quantity.	Gross Value.	Quantity.	Gross Value.
	tons.	$	tons.	$	tons.	$
Sand—						
Moulding sand	13,213	14,674	16,725	16,951	100,668	44,551
For building, concrete, roads, etc.	787,412	264,435	956,502	362,542	1,356,269	476,824
Other	44,082	10,609	15,096	5,795	59,007	13,087
Sand and Gravel—						
For railway ballast	2,267,195	415,092	6,318,681	1,054,703	2,764,639	533,876
For concrete, roads, etc	17,531,047	5,357,331	14,336,640	5,216,942	19,453,188	8,340,764
For mine filling	[1]	–	[1]	–	1,170,260	146,811
Crushed gravel	570,540	327,299	480,516	264,466	2,097,270	936,783
Totals, Sand and Gravel	**21,213,489**	**6,389,440**	**22,124,160**	**6,921,399**	**27,001,301**	**10,492,696**
Stone—						
Building	200,899	1,258,741	42,335	714,616	49,098	746,370
Monumental and ornamental	15,163	342,950	8,975	281,656	8,301	278,325
Limestone for agriculture	87,884	134,716	94,031	116,397	112,628	131,071
Chemical Uses—						
Flux	269,629	186,858	279,299	187,240	345,742	266,780
Pulp and paper	160,870	165,784	197,957	197,523	200,893	219,461
Other	107,300	131,067	137,951	168,834	147,312	140,056
Rubble and riprap	314,484	198,537	475,845	250,581	699,586	608,453
Crushed	3,132,384	2,723,191	3,702,153	3,043,407	5,309,039	4,306,867
Totals, Stone[2]	**4,316,818**	**5,303,234**	**4,981,665**	**5,128,739**	**6,935,612**	**6,939,360**

[1] Relatively small and included with "For concrete, roads, etc.".

[2] Totals include minor items not specified.

The quantities and values of stone produced, given in the table above, represent only the production of those establishments which actually quarry their own stone and are exclusive of the products of the stone-dressing industry comprising those establishments which buy rough stone and dress, polish, or finish it; although dressing operations are frequently carried on right at the quarry and to that extent cannot be separated from the primary production. Of the total quantity of stone produced in 1937 about 80 p.c. was limestone, 16 p.c. granite, 3·4 p.c. sandstone. and 0·3 p.c. marble. The average value per ton was $0·84 for limestone, $1·61 for granite, $1·46 for sandstone, and $4·09 for marble. Prices averaged lower in 1937 than in 1936 because a larger proportion of all stone except marble was used for riprap and crushed stone. The marble was used chiefly for stucco dash, in glass factories, pulp and paper mills, and other industrial processes, for poultry grit, and pulverized as whiting. Large quantities of limestone were used for fluxing and other chemical purposes, but by far the largest part of all stone except marble was used as crushed stone.


DEPARTMENT OF MINES AND RESOURCES CANADA
SURVEYS AND ENGINEERING BRANCH
DOMINION WATER AND POWER BUREAU
CANADA
(EXCLUSIVE OF NORTHERN REGIONS)
WATER POWERS
SCALE OF MILES
0 100 200 300 400 500
GROWTH OF WATER POWER DEVELOPMENT IN CANADA
Jan.1st
1916
1918
1920
1922
1924
1926
1928
1930
1932
1934
1936
1938
0 1 2 3 4 5 6 7 8
MILLIONS OF HORSEPOWER
AVAILABLE WATER POWER BY PROVINCES
(AT ORDINARY MINIMUM FLOW)
YUKON
& N.W.T.
B.C.
ALTA
SASK
MAN.
ONT.
QUE
MAR. PROVS
0 1 2 3 4 5 6 7 8
MILLIONS OF HORSEPOWER
LEGEND
Water Powers ---
Developed Sites ●
Undeveloped Sites ○
Capacity of Sites ---
1,000 h.p. or under
1,000 h.p. - 100,000 h.p.
100,000 h.p. - 1,000,000 h.p.
Above 1,000,000 h.p.
140
130
120
110
100
90
80
70
60
50
40
ALASKA
DAWSON
YUKON
Pelly R.
Norman
Mackenzie R.
Skagway
Liard R.
Great Slave Lake
Ft. Smith
River
Peace
L. Athabaska
McMurray
Peace River
BRITISH COLUMBIA
Prince Rupert
Skeena
Queen Charlotte Is
Fraser R.
VICTORIA
Vancouver
PACIFIC OCEAN
ALBERTA
EDMONTON
C.N.
Calgary
Saskatchewan R.
S. Saskatchewan R.
N. Saskatchewan
SASKATCHEWAN
Saskatoon
CAN. NAT.
REGINA
Churchill R.
MANITOBA
Nelson R.
Churchill
Port Nelson
Lake Winnipeg
WINNIPEG
HUDSON BAY
Belcher Is
Gt. Whale R.
James Bay
Severn R.
Albany River
ONTARIO
L. Nipigon
Ft. William
L. Superior
Sault Ste Marie
L. Michigan
L. Huron
Sudbury
Cochrane
Ottawa R.
OTTAWA
TORONTO
L. Ontario
Windsor
L. Erie
C. Chidley
Ungava Bay
QUEBEC
Mistassini L.
L. St. John
QUEBEC
MONTREAL
St. Lawrence R.
COAST OF LABRADOR
Hamilton R.
Anticosti I.
Gulf of St. Lawrence
Str. of Belle Isle
NEWFOUNDLAND
NEW BRUNSWICK
FREDERICTON
Saint John
PRINCE EDWARD ISLAND
NOVA SCOTIA
HALIFAX
C. Breton I.
Sydney

CHAPTER XIII.—WATER POWERS.

The fresh-water area of Canada is officially estimated at 228,307 square miles—an area nearly twice as large as the whole land area of the British Isles, and certainly larger than the fresh-water area of any other country in the world. As many parts of this well-watered country are situated at considerable heights above sea-level, there are great sources of potential energy in the rapids and waterfalls of the rivers conveying the waters from these areas to the sea. Water power, therefore, is among the chief natural resources of Canada, and its development has in recent years contributed materially to swell the volume of Canadian production.

This chapter of the Year Book is divided into three main sections: the first describes our water powers, their development and use in industry; the second deals with the Canadian central electric station industry, which is based almost wholly upon hydro-electric power; the third treats of the public ownership of hydro-electric power in Ontario, the chief manufacturing area, and also describes the policies of the Hydro-Electric or Power Commissions in other provinces.

Section 1.—The Water Powers of Canada.*

The progress of civilization in its material aspects may be measured by the extent to which the resources of nature are adapted to the uses of mankind. These resources yield, in the first instance, raw materials such as coal and iron, cotton and lumber, hides and wool, which enter into so many things that they are spoken of as basic commodities. Energy, until comparatively recently, was secured largely by the combustion of coal and was therefore looked upon as a secondary product, whereas, when produced from falling water, it is just as much a primary product as coal itself. Energy now enters so largely into the scheme of modern existence that it is recognized as basic. Statistics are published, just as with the production of pig iron, coal or cotton. In this case they show the kilowatt hours of electric energy produced and take note of undeveloped water power as being a source of raw material, just as important as uncut forests or untapped oil fields. The relationship of power to production is now so vital, that those associated with power development in any country are keenly interested in methods and progress in other parts of the world. To facilitate a study of world power conditions, three Plenary World Power Conferences have already been held to consider the technical, economic, and statistical aspects of power development. The latest of these Conferences, held at Washington in September, 1936, was composed of representatives of more than fifty member States. Following these Conferences, sectional meetings were held to consider special problems related to the production and supply of energy. Tentative arrangements have been made for the holding of a fourth World Power Conference at Tokyo, Japan, in 1942.

Canada is richly endowed with water-power resources and is in the forefront as regards their utilization. In fact, practically every large industrial centre throughout the Dominion is now served with hydro-electric energy and has within practical transmission distance substantial reserves for the future. More than 95 p.c. of the total main-plant equipment of the central electric stations of Canada is hydro-power, and this equipment generates more than 98 p.c. of the total electrical output.

---

* By J. T. Johnston, Controller, Dominion Water and Power Bureau, Surveys and Engineering Branch, Department of Mines and Resources, Ottawa.

Indeed, water power is a mainspring of industrial progress in the central provinces, which have no indigenous coal supplies. Table **1** shows the provincial distribution of available and developed power in Canada at Dec. 31, 1938.

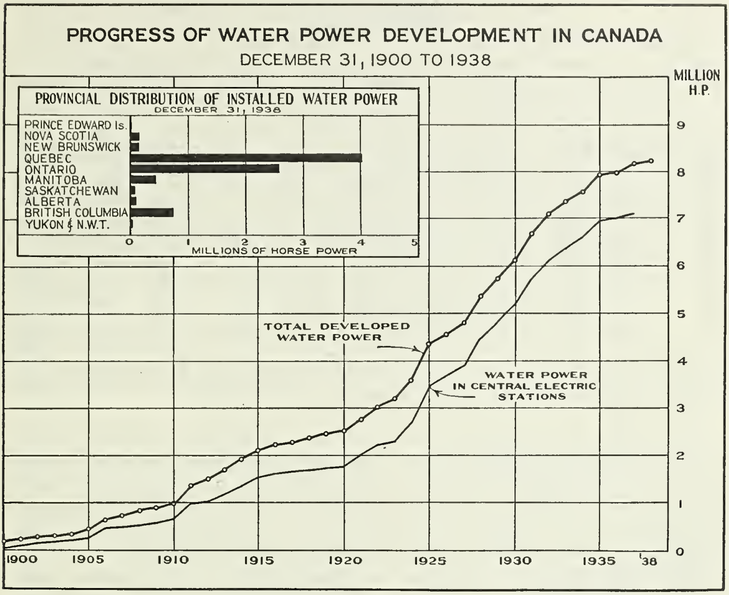
1.—Available and Developed Water Power in Canada, by Provinces, Dec. 31, 1938.

Province or Territory.	Available 24-Hour Power at 80 p.c. Efficiency.		Turbine Installation.
	At Ordinary Minimum Flow.	At Ordinary Six-Month Flow.	
	h.p.	h.p.	h.p.
Prince Edward Island	3,000	5,300	2,617
Nova Scotia	20,800	128,300	130,617
New Brunswick	68,600	169,100	133,347
Quebec	8,459,000	13,064,000	4,031,063
Ontario	5,330,000	6,940,000	2,582,959
Manitoba	3,309,000	5,344,500	420,925
Saskatchewan	542,000	1,082,000	61,035
Alberta	390,000	1,049,500	71,997
British Columbia	1,931,000	5,103,500	738,013
Yukon and Northwest Territories	294,000	731,000	18,199
Canada	**20,347,400**	**33,617,200**	**8,190,772**

The figures of available power in the above table are based upon rapids, falls, and power sites of which the actual existent drop, or the head of possible concentration, is definitely known or at least well established. Innumerable rapids and falls of greater or smaller power capacity, not as yet recorded, are scattered on rivers and streams from coast to coast and will only become available for tabulation as more detailed survey work is undertaken and completed. This is particularly true of the less explored northern districts. Nor is any consideration given to the power concentrations which are feasible on rivers and streams of gradual gradient, where economic heads may be created by the construction of power dams, excepting only at points where definite studies have been carried out and the results made matters of record.

The turbine installation in the above table represents the actual water wheels installed throughout the Dominion, but these figures should not be placed in direct comparison with the available power figures for the purpose of deducing therefrom the percentage of the available water-power resources developed to date. The actual water-wheel installation throughout the Dominion averages 30 p.c. greater than corresponding maximum available power figures calculated at ordinary six-month flow. The figures quoted above, therefore, indicate that the "at present recorded water-power resources" of the Dominion will permit of a turbine installation of about 43,700,000 h.p. In other words, the present turbine installation represents only 18¾ p.c. of the present recorded water-power resources and the figures of available power in Table **1** may be said to represent the minimum water-power possibilities of the Dominion.

Growth of Water-Power Development.—The commencement of the long-distance transmission of electricity at the beginning of the present century resulted in the extensive development of hydro-electricity for distribution over wide areas. The growth of installation during the period from 1900 to 1938 is shown, by provinces, in Table **2**.



PROGRESS OF WATER POWER DEVELOPMENT IN CANADA
DECEMBER 31, 1900 TO 1938

2.—Hydraulic Turbine Horse-Power Installed in Canada, by Provinces, as at Dec. 31, 1900-38.

Year.	P.E.I.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.[1]
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1900...	1,521	19,810	4,601	82,864	53,876	1,000	-	280	9,366	173,323
1901...	1,581	20,132	4,601	139,149	62,788	1,000	-	280	9,366	238,902
1902...	1,641	21,944	4,636	152,783	77,022	1,000	-	280	13,266	272,577
1903...	1,641	23,518	7,427	164,258	79,909	1,000	-	355	20,346	298,459
1904...	1,641	26,228	8,459	179,468	111,697	1,000	-	355	26,396	355,249
1905...	1,663	26,563	8,594	183,799	202,896	1,000	-	355	29,334	454,209
1906...	1,701	26,952	10,134	205,211	279,028	38,800	-	355	45,816	608,002
1907...	1,701	27,977	10,172	242,582	345,404	38,800	-	355	58,570	727,646
1908...	1,701	28,419	10,407	269,814	410,079	38,800	-	655	58,610	820,580
1909....	1,734	29,381	10,507	305,556	437,613	38,800	-	655	63,048	890,489
1910...	1,760	31,476	11,197	334,763	490,821	38,800	30[2]	655	64,474	977,171
1911...	1,760	32,226	13,635	468,977	634,263	64,800	30	14,855	119,393	1,363,134
1912...	1,785	32,773	15,185	513,635	659,190	64,800	30	15,035	165,838	1,481,466
1913...	1,825	32,964	15,185	551,871	751,545	64,800	30	32,835	224,680	1,688,930
1914...	1,843	33,469	15,380	664,139	858,534	78,850	30	33,110	252,690	1,951,244
1915...	1,942	33,596	15,405	803,786	871,309	78,850	30	33,110	254,265	2,105,492
1916...	1,962	33,656	15,480	836,394	921,158	78,850	30	33,110	288,330	2,222,169
1917...	1,989	34,051	16,251	856,769	955,955	78,850	30	33,122	297,169	2,287,385
1918...	2,198	34,318	16,311	905,303	981,313	85,325	35	33,122	307,533	2,378,657
1919...	2,233	35,193	19,126	936,903	1,036,550	85,325	35	33,122	308,364	2,470,050
1920...	2,233	37,623	21,976	955,090	1,057,422	85,325	35	33,122	309,534	2,515,559
1921...	2,252	48,908	30,976	1,050,338	1,165,940	99,125	35	33,122	310,262	2,754,157
1922...	2,274	49,142	42,051	1,099,404	1,305,536	134,025	35	33,122	329,557	3,008,345
1923...	2,274	50,331	43,101	1,135,481	1,396,166	162,025	35	33,122	356,118	3,191,852
1924...	2,274	65,572	44,521	1,312,550	1,595,396	162,025	35	34,532	360,492	3,590,596

For footnotes, see end of table, p. 362.

2.—Hydraulic Turbine Horse-Power Installed in Canada, by Provinces, as at Dec. 31, 1900-38—concluded.

Year.	P.E.I.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.[1]
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
1925...	2,274	65,637	42,271	1,749,975	1,802,562	183,925	35	34,532	443,852	4,338,262
1926...	2,274	66,147	47,131	1,886,042	1,808,246	227,925	35	34,532	463,852	4,549,383
1927...	2,274	68,416	47,131	2,069,518	1,832,655	255,925	35	34,532	475,232	4,798,917
1928...	2,439	74,356	67,131	2,387,118	1,903,705	311,925	35	34,532	554,792	5,349,232
1929...	2,439	109,124	112,631	2,595,430	1,952,055	311,925	35	70,532	559,792	5,727,162
1930...	2,439	114,224	133,681	2,718,130	2,088,055	311,925	42,035	70,532	630,792	6,125,012
1931...	2,439	111,999	133,681	3,100,330	2,145,205	390,925	42,035	70,532	655,992	6,666,337
1932...	2,439	112,167	133,681	3,357,320	2,208,105	390,925	42,035	71,597	713,792	7,045,260
1933...	2,439	112,167	133,681	3,493,320	2,355,105	390,925	42,035	71,597	717,602	7,332,070
1934...	2,439	116,367	133,681	3,703,320	2,355,755	390,925	42,035	71,597	717,717	7,547,035
1935...	2,439	116,367	133,681	3,853,320	2,560,155	392,825	42,035	71,597	718,497	7,909,115
1936...	2,439	120,667	133,681	3,883,320	2,561,905	392,825	42,035	71,597	718,922	7,945,590
1937...	2,439	123,437	133,681	3,999,686	2,577,380	405,325	61,035	71,597	719,972	8,112,751
1938...	2,617	130,617	133,347	4,031,063	2,582.959	420,925	61,035	71,997	738,013	8,190,772

[1] Includes totals for Yukon. Turbine horse-power in Yukon was 5 from 1900 to 1906, 2,085 in 1907, 2,095 in 1908, 3,195 in 1909 and 1910, 13,195 from 1911 to 1913, 13,199 from 1914 to 1934, and 18,199 from 1935 to 1938. [2] First reported installation in Saskatchewan.

Distribution of Developed Water Power.—An analysis is made in Table 3 of the distribution of developed water power among central electric stations, pulp and paper mills and other industries. The extent to which pulp and paper manufacturing is dependent on water power is clearly shown by the figures there given, which indicate that 7·9 p.c. of the developed power is installed by pulp and paper companies, in comparison with 4·2 p.c. developed by all other industries (excluding central electric stations). The pulp and paper industry also purchases a large amount of power from the central electric stations, and about 95 p.c. of its machinery is driven by water power. The bulk of the water power used in other industries is developed by central electric stations, converted into electricity and delivered to the various industrial plants.

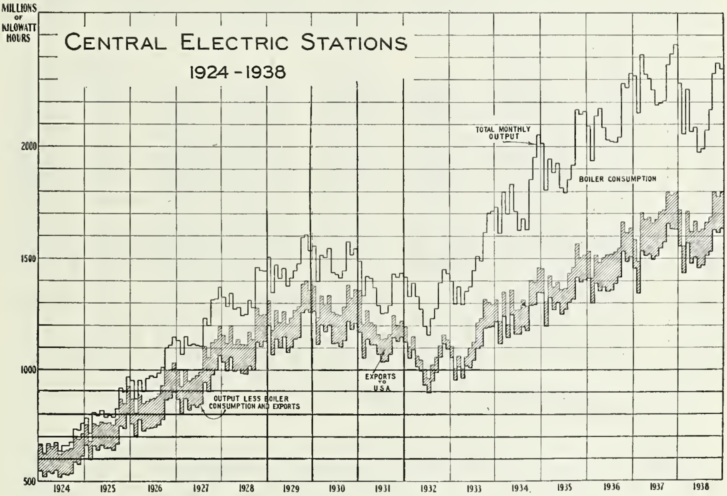
3.—Developed Water Power in Canada: Distribution, by Provinces and Industries, and per 1,000 Population, as at Dec. 31, 1938.

Province or Territory.	Turbine Installation in H P.				Population, June 1, 1938.[4]	Total Installation per 1,000 Population.
	In Central Electric Stations.[1]	In Pulp and Paper Mills.[2]	In Other Industries.[3]	Total.		
Prince Edward Island......	579	Nil	2,038	2,617	94,000	28
Nova Scotia................	96,268	18,858	15,491	130,617	548,000	238
New Brunswick............	104,710	20,694	7,943	133,347	445,000	300
Quebec....................	3,619,438	273,022	138,603	4,031,063	3,172,000	1,270
Ontario....................	2,248,883	228,377	105,699	2,582,959	3,731,000	692
Manitoba..................	420,925	Nil	Nil	420.925	720,000	584
Saskatchewan..............	61,000	"	35	61,035	941,000	65
Alberta....................	69,920	"	2,077	71,997	783,000	92
British Columbia..........	578,536	105,950	53,527	738,013	761,000	970
Yukon and Northwest Territories..................	2,000	Nil	16,199	18,199	14,000	1,300
Canada...........	**7,202,259**	**646,901**	**341,612**	**8,190,772**	**11,209,000**	**731**
Percentages of total installation..................	87·9	7·9	4·2	100·0	-	-

[1] Includes only hydro-electric stations which develop power for sale. [2] Includes only water power *actually developed* by pulp and paper companies. In addition to this turbine installation, pulp and paper companies have motor equipment for operation by hydro-electricity purchased from the central electric stations aggregating more than 1,200,000 h.p., making a total of more than 1,846,000 h.p. actually developed for the manufacture of pulp and paper. Large amounts of electricity are also purchased for use in electrical boilers. [3] Includes only water power *actually developed* in connection with industries other than the central electric station and pulp and paper industries. These industries also purchase power from the central electric stations. [4] Estimated by the Dominion Bureau of Statistics.

Section 2.—Central Electric Stations.*

The rapid growth of the central electric station industry has been stimulated by the large demand for power from the manufacturing industries, particularly pulp and paper plants, and from the domestic and commercial light customers, and also by the many improvements in generating and transmitting equipment and in electrical appliances and motors. In Table 4 will be found statistics of the number of central electric stations, capital invested, revenue from sale of power, total horsepower, kilowatt hours generated and number of customers for the 21 years ended 1937, together with the number of persons employed and the amount expended for salaries and wages. The total output for 1937 amounted to 27,687,646,000 kilowatt hours which was a new high record for the industry. Based on preliminary figures from the large stations, the total production in 1938 is estimated at 26,000,000,000 kilowatt hours.



Exports to the United States reached a low point in 1932 with 467,215,000 kilowatt hours, but they began a steady increase about the middle of 1933 and continued to increase each year, the total for 1938 being 1,826,515,000 kilowatt hours, or four times the low record of 1932. The use of electric energy in electrical boilers in various industries and particularly in the pulp and paper mills has increased rapidly and fairly steadily. In 1937 it reached a high record of 7,313,014,000 kilowatt hours, or 26 p.c. of the total output, and more than double the quantity so used in 1932. This power is partly off-peak power available at various times each day and partly surplus power available continuously until a better market develops. The domestic service consumption or the electricity used in residences has also increased steadily even during the years 1930-33 and in 1937 amounted to 2,007,433,000 kilowatt hours, an increase of 35 p.c. over the 1930 consumption and 6 p.c. over the 1936 consumption.

---

* Revised by G. S. Wrong, B.Sc., Chief, Transportation and Public Utilities Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX.

Interesting factors affect the relative per capita consumptions of electricity from central electric stations in Canada and the United States. An abundant supply of low-priced coal in the industrial area of the United States, and no coal but an excellent supply of water power in the central provinces of Canada, tend to favour the generation of power in central stations in Canada. Again, the pulp and paper industry is proportionately a smaller industry in the United States than in Canada. While the average consumption for domestic use is 69 p.c. higher in Canada than in the United States, the total consumption for domestic or residential use is about 7·2 p.c. of the total output of central electric stations for Canada and 17·0 p.c. for the United States.

4.—Summary Statistics of Central Electric Stations, calendar years 1917-37.

Year.	Stations.[1]	Capital Invested.	Revenue from Sale of Power.[2]	Total Horse-Power.[3]	Kilowatt Hours Generated.	Customers.	Persons Employed.	Salaries and Wages.
	No.	$	$	h.p.	'000	No.	No.	$
1917.....	666	356,004,168	[4]	1,844,571	[4]	[4]	8,847	7,777,715
1918.....	795	401,942,402	43,908,085	1,841,114	[4]	[4]	9,696	10,354,242
1919.....	805	416,512,010	47,933,490	1,907,135	5,497,204	[4]	9,656	11,487,132
1920.....	506	448,273,642	53,436,082	1,897,024	5,894,867	894,158	10,693	14,626,709
1921.....	510	484,669,451	58,271,622	1,977,857	5,614,132	973,212	10,714	15,234,678
1922.....	522	568,068,752	62,173,179	2,258,398	6,740,750	1,053,545	10.684	14,495,250
1923.....	532	581,780,611	67,496,893	2,423,845	8,099,192	1,112,547	11,094	14,784,038
1924.....	532	628,565,093	74,616,863	2,849,450	9,315,277	1,200,950	12,956	17,946,584
1925.....	563	726,721,087	79,341,584	3,569,527	10,110,459	1,279,731	13,263	18,755,907
1926.....	595	756,220,066	88,933,733	3,769,323	12,093,445	1,337,562	13,406	19,943,000
1927.....	629	866,825,285	104,033,297	4,173,349	14,549,099	1,381,966	14,708	22,946,315
1928.....	601	956,919,603	112,326,819	4,627,667	16,336,518	1,464,005	15,855	24.253,820
1929.....	587	1,055,731,532	122,883,446	4,925,555	17,962,515	1,555,883	16,164	24,831,821
1930.....	587	1,138,200,016	126,038,145	5,401,108	18,093,802	1,607,766	17,857	27,287,443
1931.....	559	1,229,988,951	122,310,730	5,706,757	16,330,867	1,632,792	17,014	26.306,956
1932.....	572	1,335,886,987	121,212,679	6,343,654	16,052,057	1,657,454	15,395	23,261,166
1933.....	575	1,386,532,055	117,532,081	6,616,006	17,338,990	1,666,882	14,717	21,431,877
1934.....	573	1,430,852,166	124,463,613	6,854,161	21,197,124	1,660,079	14,974	21,829,491
1935.....	566	1,459,821,168	127,177,954	7,104,142	23,283,033	1,694,703	15,342	22,519,993
1936.....	561	1,483,116,649	135,865,173	7,119,272	25,402,282	1,740,793	16,087	23,367,091
1937.....	568	1,497,330,231	143,546.643	7,342,085	27,687.646	1,805,995	17,018	25,623,767

[1] Excluding non-generating stations in 1920 and subsequent years. [2] Revised to exclude duplications. [3] Not including auxiliary plant equipment. [4] Data not available.

Equipment of Central Electric Stations.—The main-plant primary power equipment of all central electric stations aggregated 7,342,085 h.p. in 1937. This included water wheels and turbines, steam reciprocating engines and turbines, and internal combustion engines. The hydraulic power machines greatly predominated over the other prime movers, providing 95·7 p.c. of the total capacity, with steam turbines, steam reciprocating engines and internal combustion engines making up the remaining 4·3 p.c. Not included in the above were steam engines and internal combustion engines with a capacity of 197,350 h.p., or 2·6 p.c. of the total power capacity, installed as auxiliary or standby equipment.

Central electric stations that have no water power, but are operated by steam and internal combustion engines, are on the whole small stations. Of the 44 main-plant steam reciprocating engines in central electric stations in 1937, only 8 in number were over 500 h.p. The steam turbines averaged approximately 4,300 h.p. with 20 units averaging 9,300 h.p., but there were only 65 steam turbines in the industry and these were confined to 26 stations, whereas the 819 water wheels and turbines averaged 8,600 h.p., including 4 at 65,000 h.p. and 5 at 66,000 h.p. each.

The majority of the fuel-using stations are primarily for lighting purposes, using the cheapest fuel procurable, generally local coal. In the Prairie Provinces bituminous and lignite coals are used for the steam engines and gasoline, oil distillates, and producer gas for the internal combustion engines.

Of the 358 main-plant internal combustion engines in central electric stations in 1937, 194, or 54 p.c., were in Saskatchewan, 63 or 18 p.c. in Alberta, and 25 or 7 p.c. in Manitoba.

During 1937, the thermal engines produced 511,923,000 kilowatt hours at a cost for fuel of $2,582,729, an average of 0·5 cents per kilowatt hour. This production was, however, less than 2 p.c. of the total output.

5.—Main-Plant Equipment of Central Electric Stations, by Provinces, and Total Auxiliary Equipment, 1937.

Note.—kva. means kilo-volt-amperes.

Type of Equipment and Province.	Power Plants.	Water Wheels and Turbines.			Steam Engines, Steam Turbines and Internal Combustion Engines.			Dynamos.		
		No.	Capacity.	Average Capacity.	No.	Capacity.	Average Capacity.	No.	Capacity.	Average Capacity.
	No.		h.p.	h.p.		h.p.	h.p.		kva.	kva.
Main-Plant Equipment.										
P. E. Island.....	9	8	432	54	9	6,235	693	16	5,147	322
Nova Scotia.....	48	54	85,169	1,577	33	68,751	2,083	87	131,734	1,514
New Brunswick..	14	17	106,010	6,236	16	33,489	2,093	33	118,528	3,592
Quebec..........	96	264	3,510,756	13,298	7	2,600	371	270	3,122,346	11,564
Ontario..........	135	341	2,223,948	6,522	16	1,415	88	353	1,785,886	5,059
Manitoba........	27	41	469,300	11,446	40	4,155	104	82	383,255	4,674
Saskatchewan...	115	Nil	–	–	219	139,321	636	215	117,806	548
Alberta..........	61	18	69,920	3,884	96	60,390	629	109	105,019	963
British Columbia and Yukon.....	63	76	557,707	7,338	31	2,487	80	109	436,744	4,007
Totals......	568	**819**	**7,023,242**	**8,575**	**467**	**318,843**	**683**	**1,274**	**6,206,465**	**4,872**
Auxiliary-Plant Equipment.	Nil	Nil	–	–	128	197,350	1,542	119	167,839	1,410
Grand Totals...	**568**	**819**	**7,023,242**	**8,575**	**595**	**516,193**	**868**	**1,393**	**6,374,304**	**4,576**

Provincial Distribution of Electric Energy.—The distribution by provinces of the electric energy generated in central electric stations throughout Canada is shown in Table **6** for the calendar years 1932-37. In the latest year over 83 p.c. of the total generated electric energy was produced in the leading industrial provinces of Ontario and Quebec. From Table **7** it is seen that the total electric energy exported in the calendar year 1938 was 1,826,515,000 kilowatt hours, or 7·0 p.c. of the estimated production by central electric stations in that year; in 1937 it had amounted to 1,847,099,787 kilowatt hours, or 6·7 p.c. of the total amount generated in central electric stations.

6.—Electric Energy Generated in Central Electric Stations, by Provinces, calendar years 1932-37.

Province.	1932.	1933.	1934.	1935.	1936.	1937.
	'000 kwh.	'000 kwh.	'000 kwh.	'000 kwh.	'000 kwh.	'000 kwh.
Prince Edward Island......	4,662	4,765	4,902	5,127	5,769	6,524
Nova Scotia..............	279,854	330,436	389,049	389,144	412,294	446,976
New Brunswick............	427,604	378,687	394,100	390,003	425,849	501,319
Quebec....................	8,491,128	9,611,084	11,335,987	12,628,662	13,019,908	14,341,400
Ontario...................	4,258,042	4,381,094	6,113,595	6,653,219	7,927,044	8,528,726
Manitoba..................	1,087,010	1,077,210	1,183,381	1,342,093	1,574,898	1,697,656
Saskatchewan..............	135,898	131,164	134,033	138,479	145,219	147,143
Alberta...................	195,467	182,963	193,002	208,054	216,770	222,755
British Columbia.......... Yukon....................	1,172,392	1,241,587	1,449,075	1,528,252	1,674,531	1,795,146
Totals.........	**16,052,057**	**17,338,990**	**21,197,124**	**23,283,033**	**25,402,282**	**27,687,645**

Electric Light and Power.—Electric light and power companies are subject to registration and inspection under the Electricity Inspection Act, 1907 (6-7 Edw. VII, c. 14), and the export of electric energy is regulated by the Electricity and Fluid Exportation Act, 1907 (6-7 Edw. VII, c. 16). Both Acts were administered by the Department of Inland Revenue until Sept. 1, 1918, when, by Order in Council of June 3, 1918, their administration was transferred to the Department of Trade and Commerce. (See cc. 54 and 55, R.S.C., 1927.)

In previous Year Books, Table 7 showed the quantities produced for export, including the line losses between the power houses and the International Boundary, and the data were on a fiscal-year basis. The data below in Table 7 are the quantities actually exported and are for calendar years.

7.—Electric Energy Exported under Authority of the Electricity and Fluid Exportation Act, calendar years 1935-38.

Company.	1935.	1936.	1937.	1938.
	kwh.	kwh.	kwh.	kwh.
Hydro-Electric Power Commission of Ontario	372,001,692	372,415,114	386,310,900	387,249,300
Hydro-Electric Power Commission of Ontario (surplus)	178,944,660	299,406,823	439,491,214	417,251,923
Canadian Niagara Power Company	328,112,617	350,025,172	379,904,201	371,864,078
Canadian Niagara Power Company (surplus)	25,498,800	34,706,000	12,109,200	35,980,900
Ontario and Minnesota Power Co	15,229,400	23,535,200	35,215,850	18,908,900
Maine and New Brunswick Electric Power Co	13,239,529	14,072,901	16,700,587	17,515,863
British Columbia Electric Railway Co	177,095	183,727	188,113	194,005
Western Power Company of Canada	34,200	Nil	Nil	Nil
Southern Canada Power Co	386,846	390,286	444,398	454,216
Cedars Rapids Manufacturing and Power Co	423,628,980	476,789,253	570,733,439	570,817,684
Maritime Electric Company, St. Stephen, N.B	1,180,280	1,708,860	894,963[1]	431,140
Fraser Companies, Ltd	5,566,000	4,129,000	3,873,000	4,412,000
Northport Power and Light Co	291,072	289,246	305,958	288,300
Northern B.C. Power Co	40,970	53,660	39,270	29,850
Detroit and Windsor Subway Co	254,400	257,300	277,800	279,600
Manitoba Power Commission	Nil	146,700	610,894	837,600
Totals	**1,364,586,541**	**1,578,109,242**	**1,847,099,787**	**1,826,515,359**

[1] Exported by Canadian Cottons, Ltd., from April, 1937.

Section 3.—Public Ownership of Hydro-Electric Power.

When, in the early years of the twentieth century, it became evident that the development of hydro-electric power would become a "key industry" in Canada, more especially in its coal-less central provinces of Ontario and Quebec, a strong movement arose in favour of conserving the water powers of the country for the public benefit instead of allowing them to pass into the hands of private corporations. This "public ownership" movement developed especial strength in Ontario and finally led to the establishment of the Hydro-Electric Power Commission, the operating statistics of which are given in Subsection 1. More recently, Manitoba, Nova Scotia, New Brunswick, and Saskatchewan have established Hydro-Electric Commissions on the model of the Ontario system. In Quebec and British Columbia, on the other hand, the development of hydro-electric power has been left in the hands of private corporations.

Subsection 1.—The Hydro-Electric Power Commission of Ontario.*

The publicly-owned hydro-electrical undertaking of Ontario—known in the province as the "Hydro"—is an organization of a large number of partner-municipalities, co-ordinated into groups or systems for securing common action with respect to power supplies. It had its beginning in 1903, when, as a result of public agitation to ensure the provision of adequate supplies of electric power for distribution throughout the province at low cost, seven municipalities united under statutory authority in appointing an investigating commission to deal with power problems. This commission, known as the Ontario Power Commission, completed its work in 1906, and in the same year the Ontario Government, by special Act, created the present Hydro-Electric Power Commission of Ontario. The operations of the undertaking have grown rapidly and in 1937 electrical service was supplied by the Commission to about 795 municipalities, comprising nearly all of the cities and towns of the province, as well as many small communities and rural areas.

---

* Revised by R. T. Jeffery, Chief Municipal Engineer, Hydro-Electric Power Commission of Ontario, Toronto, Ontario.

The providing of the power, either by generation or purchase, its transformation, transmission, and delivery to the individual municipalities and to large industrial consumers, and the operation of rural power districts are carried on by the municipalities acting *collectively* through their agent and trustee, the Hydro-Electric Power Commission of Ontario. The local operations involved in the retail distribution of the electric energy to the consumers within the limits of the various urban municipalities are performed by the municipalities *individually* through municipal utility commissions acting under the general supervision of the Hydro-Electric Power Commission.

Capital required for plant to generate and transmit power is lent by the province, and the muncipalities are under contract to repay, over a period of 40 years, the moneys thus lent, with interest in full. The local distribution systems are financed individually by the issue of municipal debentures. Provision is made, in the rates charged to the ultimate consumers, for revenue with which to retire these bonds in from 20 to 30 years. The rates at which power is supplied by the Commission to the various municipalities vary with the amounts of power used, the distances from the sources of supply, and other factors. The basic principle underlying the operations of the undertaking is the provision of service 'at cost'. The rates charged by the municipal utilities for retail service are under the control of the Commission and are designed to ensure that each class of consumer bears its appropriate share of the expenses of the undertaking. Each type of consumer is charged with the cost of the service received as far as is practicable.

Power Supplies.—To meet the constantly expanding power demands of the undertaking, the Commission has constructed its own generating plants, and has acquired several privately-owned generating plants. Of the 43 hydro-electric power plants operated by the Commission in 1937, the largest is the Queenston-Chippawa development on the Niagara river which was constructed by the Commission and has a normal operating capacity of 500,000 h.p. Provision for the needs of the near future has been made — including existing plants, plants under construction and power under contract for present and future delivery—up to an aggregate of about 1,600,000 h.p.

Hydro-Electric Power Commission Statistics.—The Canada Year Book of 1910 (p. xliii) described the turning on, at Berlin (now Kitchener), Ontario, on Oct. 11, 1910, of electric energy generated by Niagara falls. The small initial load of less than 1,000 h.p. increased rapidly and by 1915 had reached 100,000 h.p. In 1920 the total power distributed exceeded 350,000 h.p., and in 1930 it was over 1,260,000 h.p. Table 8 shows the growth of the co-operative municipal electrical undertaking of Ontario. It will be noted that the total capital of the undertaking, which includes investments of the Hydro-Electric Power Commission in power-producing and transmitting equipment, etc., and investments of the municipalities in distributing systems and other assets, aggregated over $424,000,000 in 1937.

8.—Summary Statistics Representative of the Growth of the Ontario Hydro-Electric Power Commission's Undertaking, fiscal years ended Oct. 31, 1910-37.

Year.	Municipalities Served.	Customers Served.	Total Power Distributed by Commission.	Capital of Commission and Assets of Municipal Utilities.
	No.	No.	h.p.	$
1910	10	[1]	2,500	2,521,000
1911	26	[1]	15,200	4,020,000
1912	36	[1]	31,000	4,576,000
1913	58	58,961	45,000	17,698,000
1914	95	96,744	77,000	25,023,000
1915	131	116,892	104,000	29,791,000
1916	191	155,052	167,000	34,917,000
1917	215	181,711	333,000	74,701,000
1918	236	194,382	316,000	87,812,000
1919	252	230,472	328,000	103,591,000
1920	266	261,582	355,000	128,334,000
1921	301	285,923	529,000	193,918,000
1922	348	364,988	605,000	220,594,000
1923	393	387,983	685,486	236,023,000
1924	418	415,922	691,198	254,189,000
1925	444	439,702	816,295	265,998,000
1926	501	448,241	928,032	274,972,000
1927	530	469,572	949,700	286,165,000
1928	560	522,770	1,032,500	297,204,000
1929	607	552,321	1,136,689	314,237,000
1930	668	586,267	1,263,512	359,648,000
1931	721	600,297	1,107,227	373,010,000
1932	747	611,955	1,108,037	382,558,000
1933	757	621,418	1,366,735	394,661,000
1934	760	624,801	1,451,699	398,225,000
1935	766	636,134	1,625,733	408,001,000
1936	782	649,517	1,509,667	413,710,000
1937	795	667,863	1,648,467	424,422,000

[1] Information not available.

Table 9 shows the growth in load in the various systems during the past five years.

9.—Distribution of Power to Systems of the Ontario Hydro-Electric Power Commission, fiscal years ended Oct. 31, 1933-37.

(20-minute peak horse-power—system coincident peaks.)

System and District.	1933.	1934.	1935.	1936.	1937.
	h.p.	h.p.	h.p.	h.p.	h.p.
Niagara system	1,055,697	1,071,046	1,177,346	1,006,166	1,126,675
Dominion Power and Transmission	45,710	50,670	54,155	54,021	57,507
Georgian Bay system	23,887	24,488	27,534	26,555	29,310
Eastern Ontario system	86,890	121,823	133,733	117,969	129,584
Thunder Bay system	90,450	99,866	113,673	133,914	134,678
Manitoulin district	80	88	114	138	137
Northern Ontario Properties—					
Nipissing district	3,539	3,840	3,921	4,115	4,812
Sudbury district	12,466	12,466	13,070	14,021	14,611
Abitibi district	45,389	64,075	96,814	146,783	143,432
Patricia district	2,627	2,828	3,512	4,182	5,013
Espanola district	[1]	509	547	101	Nil
St. Joseph district	[1]	[1]	1,314	1,702	2,708
Totals	**1,366,735**	**1,451,699**	**1,625,733**	**1,509,667**	**1,648,467**

[1] Not in operation.

The initial capital expenditure to serve some twelve municipalities amounted to about $3,600,000. Table **10** shows for the latest five years the capital investment in the respective systems of the undertaking and in the associated municipal undertakings.

10.—Capital Investments in Ontario's Hydro Undertakings, fiscal years ended Oct. 31, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Investments by Commission on behalf of Co-operating Municipalities, in Generating Plants, Transmission Systems, etc.—					
Niagara system	201,975,671	202,429,411	210,332,868	210,746,186	211,913,158
Dominion Power and Transmission	[1]	[1]	[1]	[1]	[1]
Chats Falls development	6,167,756	6,197,129	[1]	[1]	[1]
Georgian Bay system	8,394,645	8,427,279	8,478,202	8,615,788	9,570,008
Eastern Ontario system	19,372,834	19,851,622	20,096,488	19,504,227	21,335,648
Thunder Bay system	18,630,772	18,679,611	18,669,882	18,820,351	19,477,394
Manitoulin district	32,626	35,473	35,316	35,722	42,759
Northern Ontario properties[2]	23,790,137	25,143,854	30,767,010	31,870,335	33,773,263
Hydro-electric railways	2,076,925	2,173,664	2,263,182	2,352,559	2,466,637
Office and service buildings, construction plant, inventories, etc	4,562,603	4,449,914	5,117,511	4,985,730	5,759,499
Miscellaneous, engineering, storage, etc	[3]	[3]	[3]	933,237	1,034,044
Totals, Investments by Commission	**285,003,969**	**287,387,957**	**295,760,459**	**297,864,135**	**305,372,410**
Investments by municipalities in distributing systems and other assets (exclusive of sinking fund equity in H.E.P.C. systems, included above), all systems	109,657,574	110,836,805	112,240,516	115,845,676	119,049,761
Grand Totals	**394,661,543**	**398,224,762**	**408,000,975**	**413,709,811**	**424,422,171**

[1] Included in the Niagara system. [2] The Northern Ontario properties include the Nipissing district, the Sudbury district, the Patricia district, the Abitibi district, the St. Joseph district, and the Espanola district. These properties are owned by the Government of Ontario and operated on behalf of the province by the H.E.P.C. [3] Not segregated prior to 1936.

The total reserves of the Commission and of the municipal electrical utilities for sinking fund, renewals, contingencies, and insurance purposes are shown in Table **11.**

11.—Accumulated Reserves of the Ontario Hydro-Electric Power Commission and of the Local Electrical Utilities of the Co-operating Municipalities, fiscal years ended Oct. 31, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Niagara system	52,380,601	55,092,548	57,685,921	65,716,064	74,898,521
Georgian Bay system	2,822,302	3,153,899	3,449,255	3,813,421	4,226,757
Eastern Ontario system	5,338,116	5,984,350	6,663,122	7,403,232	8,358,674
Thunder Bay system	3,104,669	3,521,436	3,960,712	4,521,100	5,319,630
Northern Ontario properties	625,282	868,609	1,475,621	2,130,914	3,345,089
Nipissing rural power districts and Manitoulin rural power district	7,560	12,714	15,930	19,376	22,163
Bonnechère storage	3,537	5,417	7,373	9,406	11,519
Service buildings and equipment	706,849	750,936	797,256	861,804	927,856
Hydro-electric railways	121,482	134,722	144,873	165,392	186,735
Insurance—workmen's compensation and staff pension insurance	4,322,862	4,690,163	5,167,636	5,645,064	6,280,691
Totals, reserves of the Commission	69,433,260	74,214,794	79,367,699	90,285,773	103,577,635
Totals, reserves—including surplus—of municipal electrical utilities	59,736,820	64,177,407	69,106,510	75,187,970	80,438,574
Totals, Commission and Municipal Reserves	**129,170,080**	**138,392,201**	**148,474,209**	**165,473,743**	**184,016,209**

Statistics of Urban Municipal Electrical Utilities of Ontario Supplied by the Commission.—The Commission exercises supervisory functions over the electrical utilities owned and operated by the partner-municipalities, and has introduced a uniform accounting system which enables the Commission to present in its Annual Reports consolidated balance sheets and operating reports regarding these utilities. These statistics relate to about 90 p.c. of the retail customers supplied by the undertaking. Summary statistics regarding service to rural consumers are given in Table **14.**

Statistics of the assets and liabilities of the electrical departments of urban municipalities served by the Hydro-Electric Power Commission are given in Table **12.** These show, for 1937, total assets of $159,082,200 as compared with liabilities of $38,611,188. Of the difference, $63,869,253 is allotted as reserves, leaving a surplus of $56,626,334. The item "Equities in H.E.P.C. systems", listed under both assets and reserves, relates to the sinking fund equities acquired by the individual municipalities in their collective generation and transmission undertaking administered by the Hydro-Electric Power Commission. All other items relate to the local distributing systems operated individually by the urban municipalities which are partners in the Hydro undertaking. In computing the percentage of net debt to total assets the equity in Hydro systems is not taken into account. It will be noted that between 1933 and 1937 total assets have increased by $23,378,947, while total liabilities have decreased by $11,309,566.

12.—Consolidated Statement of Assets, Liabilities, Reserves, and Surpluses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
Number of municipalities included	280	282	282	284	284
Assets—	$	$	$	$	$
PLANT.					
Lands and buildings	10,186,471	10,262,693	10,381,191	10,528,595	10,785,474
Substation equipment	22,306,801	22,327,619	22,072,115	22,162,208	22,900,269
Distribution systems—overhead	21,152,681	21,353,726	21,650,568	22,163,701	22,699,652
Distribution systems—underground	5,945,226	6,031,768	6,068,725	6,070,337	6,100,283
Line transformers	9,478,605	9,635,279	9,678,578	9,845,940	10,128,591
Meters	8,514,165	8,624,505	8,767,892	9,043,616	9,234,774
Street lighting equipment—regular	2,381,599	2,395,296	2,420,239	2,527,188	2,610,138
Street lighting equipment—ornamental	1,458,444	1,464,307	1,486,303	1,504,597	1,508,565
Miscellaneous construction expenses	4,040,860	3,907,360	3,616,987	4,019,431	4,389,592
Steam or hydraulic plants	502,979	494,933	496,050	496,186	496,186
Old plant	5,016,756	4,978,079	4,917,917	4,876,405	4,878,609
Plants not distributed	200,000	200,000	200,000	200,000	Nil
TOTALS, PLANT	91,184,587	91,675,565	91,756,565	93,438,204	95,732,133
OTHER.					
Bank and cash balances	1,696,489	2,215,914	2,927,486	3,921,121	3,080,864
Securities and investments	2,163,785	2,382,447	2,593,634	2,924,913	4,469,369
Accounts receivable	3,746,911	4,001,596	4,363,298	4,560,714	4,240,741
Inventories	1,226,043	1,110,705	1,212,063	1,261,844	1,336,528
Sinking funds on local debentures	9,386,177	9,161,420	9,086,152	9,535,713	10,003,874
Equities in H.E.P.C. systems	26,045,679	29,274,341	32,609,980	36,193,874	40,032,439
Other assets	253,582	289,158	301,318	203,168	186,252
Totals, Assets	**135,703,253**	**140,111,146**	**144,850,496**	**152,039,551**	**159,082,200**
Liabilities—					
Debenture balances	42,606,145	39,646,990	36,667,081	34,485,507	32,447,412
Accounts payable	3,320,486	3,149,035	2,931,934	2,879,497	2,912,960
Bank overdrafts	206,398	143,557	72,085	25,560	34,788
Other liabilities	3,787,725	3,669,008	3,462,906	3,267,142	3,216,028
Totals, Liabilities	**49,920,754**	**46,608,590**	**43,134,006**	**40,657,706**	**38,611,188**

12.—Consolidated Statement of Assets, Liabilities, Reserves, and Surpluses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
Reserves—					
For equity in H.E.P.C. systems	26,045,679	29,274,341	32,609,980	36,193,874	40,032,438
For depreciation	16,075,959	17,426,809	18,410,892	19,666,170	21,034,165
Other reserves	2,048,082	2,056,821	2,459,075	2,763,101	2,802,651
Totals, Reserves	**44,169,720**	**48,757,971**	**53,479,947**	**58,623,145**	**63,869,254**
Surpluses—					
Debentures paid	17,651,368	20,608,130	23,481,974	26,084,295	28,468,540
Local sinking funds	9,386,177	9,161,420	9,086,153	9,535,713	10,003,874
Operating surpluses	14,575,234	14,975,035	15,668,416	17,138,692	18,153,920
Totals, Surpluses	**41,612,779**	**44,744,585**	**48,236,543**	**52,758,700**	**56,626,334**
Totals, Liabilities, Reserves, and Surpluses	**135,703,253**	**140,111,146**	**144,850,496**	**152,039,551**	**159,082,200**
Percentages of net debt to total assets	40·4	35·9	32·0	28·3	25·2

13.—Statement of Earnings and Expenses of Electrical Departments of Urban Municipalities Served by the Ontario Hydro-Electric Power Commission, calendar years 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
Number of municipalities included	280	282	282	284	284
	$	$	$	$	$
Earnings—					
Domestic service	11,429,101	11,844,033	12,145,220	12,682,140	12,448,346
Commercial light service	6,013,026	6,206,086	6,458,748	6,815,439	6,510,685
Commercial power service	9,080,522	9,692.784	10,211,969	10,694,192	11,063,764
Municipal power	1,826,872	1,875,970	1,821,286	1,817,987	1,731,311
Street lighting	1,779,583	1,777,597	1,788,760	1,799,421	1,781,363
Rural service—merchandise[1]	12,813	18,748	21,670	23,159	22,971
Miscellaneous	485,925	555,172	562,286	575,826	607,036
Totals, Earnings	**30,627,842**	**31,970,390**	**33,009,939**	**34,408,164**	**34,165,476**
Expenses—					
Power purchased	19,330,862	19,591,888	20,053,677	20,486,583	20,532,737
Substation operation	484,765	468,944	478,814	478,856	490,738
Substation maintenance	288,583	296,551	297,127	301,897	300,389
Distribution systems, operation and maintenance	895,351	844,814	840,634	855,576	889,990
Line transformer maintenance	82,321	75,172	70,750	72,712	81,365
Meter maintenance	283,116	291,403	313,234	328,411	343,658
Consumers' premises expense	361,499	352,499	340,762	306,645	420,366
Street lighting, operation and maintenance	353,082	338,785	340,120	356,932	364,326
Promotion of business	259,937	228,741	252,648	288,339	294,574
Billing and collecting	817,660	827,860	835,376	945,893	980,540
General office, salaries and expenses	908,518	908,040	943,880	967,269	940,891
Undistributed expense	349,101	362,322	360,677	448,333	476,370
Truck operation and maintenance	105,453	98,082	95,151	69,805	77,995
Interest	2,426,286	2,204,994	2,040,130	1,893,304	1,752,288
Sinking fund and principal payments on debentures	2,319,319	2,358,169	2,423,088	2,448,223	2,429,565
Totals, Expenses	**29,265,853**	**29,248,264**	**29,686,068**	**30,248,778**	**30,375,792**
Surpluses	1,361,989	2,722,126	3,323,871	4,159,386	3,789,684
Depreciation charges	1,989,000	2,036,637	2,076,322	2,230,022	2,329,626
Surpluses less depreciation charges	−627,011	685,489	1,247,549	1,929,364	1,460,058

---

[1] Profits from the sale of merchandise.

Rural Electrical Service in Ontario.—During the past few years substantial progress has been made in Ontario in the field of rural electrification, and the Commission's rural operations are now an important feature of its work. Towards this rural work the Ontario Government, pursuant to its policy of promoting the basic industry of agriculture, contributes, in the form of 'grants-in-aid', 50 p.c. of the initial capital cost of distribution lines and equipment. In 1930 the Ontario Legislature passed two additional Acts relating to rural service. The Rural Power District Loans Act, 1930, provides for advances up to $1,000 to actual farm owners of lands and premises in rural power districts, for the installation of electrical wiring and the purchase of equipment. The Rural Power District Service Charge Act, 1930, provides for the fixing of low maximum service charges for all classes of rural service. In Table **14** will be found statistics relating to rural electrical distribution systems operated by the Hydro-Electric Power Commission. A steady rate of increase is apparent from these statistics.

14.—Statistics Relating to Electrical Service to Rural Power Districts Operated by the Ontario Hydro-Electric Power Commission, years ended Oct. 31, 1933-37.

Note.—*Re* rural power district legislation, consult the following Ontario Government publications:—*The Power Commission Act* (R.S.O., 1927, c. 57); *The Rural Hydro-Electric Distribution Act* (R.S.O., 1927, c. 59); *The Rural Power District Loans Act, 1930* (20 Geo. V, c. 14); and *The Rural District Service Charge Act, 1930* (20 Geo. V, c. 15).

Item.		1933.	1934.	1935.	1936.	1937.
Rural power districts	No.	171	171	171	174	177
Townships served	"	365	367	368	380	388
Consumers	"	61,845	63,840	67.802	73,614	86,194
Primary distribution lines	miles	9,174	9,461	9,976	10,808	13,117
Power supplied	h.p.	32,372	33,949	37,190	42,897	50,758
Revenues from customers	$	2,796,023	2,832,672	2,902,809	3,000.750	3,087,001
Total expenses	$	2,904,612	2,908,967	2,875,498	2.891,007	2,989,637
Net surpluses	$	−108,589	−76,295	27,311	109.743	97,364
Capital invested, totals	$	17,693,875	18,307,511	19,182,265	20.674.674	24,138.729
Provincial grants-in-aid, totals[1]	$	*8,752,993*	*9,054,080*	*9,489,671*	*10,232,099*	*11,951,892*

---

[1] Included in previous item, "Capital invested".

Subsection 2.—Hydro-Electric and Power Commissions in Other Provinces.

Quebec.—*Quebec Streams Commission.*—Created by 1 Geo. V, c. 5, and given additional powers by 3 Geo. V, c. 6 (see R.S.Q., 1925, c. 46), and by 20 Geo. V, c. 34, the Commission is authorized to ascertain the water resources of the province, to make recommendations regarding their control, and to construct certain storage dams and operate them so as to regulate the flow of streams. The Commission has not undertaken the direct production of electric power, but has assisted companies engaged in such work by a systematic collection of data on the flow of the principal rivers and on the meteorological conditions, by investigation of numerous water-power sites and determination of the longitudinal profile of a large number of rivers, but mostly by the regulation of the flow of the principal power streams, thereby increasing very materially the amount of power available. This regulation is obtained by constructing storage dams holding water in large reservoirs during flood periods and using it to increase the flow at low-water periods.

The Commission has built storage reservoirs on the St. Maurice river, where the low-water flow has been increased from 6,000 second-feet to 18,000 second-feet, on lake Kenogami, the St. Francis, the Métis, the Ste. Anne de Beaupré, and the

North rivers. The entire cost to the Commission of these storage works has been about $9,000,000 and the annual revenue exceeds $670,000.

Other reservoirs on the Gatineau, Lièvre, and Mattawin rivers which are the property of the Commission and are operated by that body have been built and paid for by the benefiting companies instead of being financed by the Commission.

Provincial Electricity Board.—Created by an Act passed at the 1937 session of the Legislature (1 Geo. VI, c. 25), the Provincial Electricity Board superseded, with wider powers, the former Quebec Electricity Commission which operated from Dec. 2, 1935, to Aug. 31, 1937. The new Board is given power to control undertakings for the production, sale, and distribution of electricity in the province, to fully investigate the property and accounts of such undertakings, to alter and cancel abusive contracts, and to fix rates for the sale of electricity based upon the value of physical assets and reasonable expenses of an undertaking. All electrical undertakings in the province are to operate under licence from the Board, such licences to remain in force for two years. The duration of all contracts for the distribution of electricity is limited to five years. The Act does not apply to municipal corporations which have established an electricity service, except that such corporations may benefit by the provisions for obtaining revision of an abusive contract.

National Electricity Syndicate.—Created by an Act of the 1937 Legislature (1 Geo. VI, c. 24), the Syndicate is intended to develop electricity-generating plants and distributing systems in the province. The Syndicate may establish its undertakings by one or both of two methods: first, by funds advanced by the Provincial Government; secondly, by the issue of stock or debentures of which the Provincial Government is to purchase at least 60 p.c. to give it a controlling interest. The Act authorizes the Syndicate to use the first method to develop generating plants and distributing systems in the electoral districts of Abitibi, Timiskaming, Lake St. John, and Roberval, and for this purpose authorizes an advance to the Syndicate of $10,000,000 which may be subsequently increased by the Legislature. No further alienation or extension of leases previously granted on water-power sites of over 300 h.p., capacity may be granted without consent of the Legislature. The Act also permits the Government to contribute up to 55 p.c. of the cost of an electricity distributing system established by any rural municipality.

Nova Scotia.—The development of water powers within the province of Nova Scotia was initiated under the Acts of 1914 and carried on in an investigatory manner in co-operation with the Dominion Government until 1919, when the Nova Scotia Power Commission was created under the Power Commission Act. The Commission consists of three members, two of whom may be members and one of whom shall be a member of the Executive Council. Although the Commission has its own Department of Investigation, certain investigatory work is still carried on in Nova Scotia by the Dominion Government represented by a branch of the Dominion Water and Power Bureau with which the Nova Scotia Power Commission is closely associated, although a separate entity.

The function of the Commission is primarily generation of electric power and energy by the most economical means available that is practically suited to the case under consideration. Its operations are carried out on a cost basis and, while a considerable number of retail customers are served, it is not the policy to compete in the retail field, but rather to serve those districts where it is not practicable to receive service from other sources. The Rural Electrification Act of 1937 greatly increased the possibilities for retail service and full advantage is being taken of this legislation by residents in various parts of the province.

The annual delivery is approximately 210,000,000 kwh. distributed to twenty-three 'bulk' power and energy customers, and more than 2,500 retail customers over a system of 755 miles of transmission and distribution lines.

The Commission operates 9 systems comprising 17 generating stations housing 36 generating units with a total installed capacity of 76,300 h.p. The *Antigonish System* is non-generating and is supplied by the *Sheet Harbour System.* It serves the town of Antigonish and various rural districts in the county of Antigonish. The *Canseau System* is made up of a number of distribution districts throughout the island of Cape Breton and is served by diesel electric units except in Mabou district for which energy is purchased from the Inverness Collieries. There are five districts at present in active operation, *viz.*, St. Peter's, Cheticamp, Mabou, Port Hawkesbury, and Isle Madame; during the year 1939 other distribution districts will be added to these known as Margaree, Grand Anse, Whycocomagh, and Judique, which will require 160 miles of transmission and distribution lines in addition to those already in use. Also a hydro-electric development of 350 installed h.p. will be constructed on Barry brook. The *Markland System* is non-generating and supplied by the *Mersey System* from its Cowie Falls development. It serves the town of Liverpool, the Caledonia valley and places in the vicinity, and supplies power for a woodworking factory. The *Mersey System* supplies the demands of a pulp and paper mill at Brooklyn, Queens county. The *Mushamush System* sells power wholesale and retail in Lunenburg county. The *Roseway System* sells power wholesale to the town of Shelburne, and wholesale and retail in the town of Lockeport and vicinity. The *Sheet Harbour System* supplies *Antigonish System* and the town of Truro through the Pictou County Power Board to which it sells power wholesale. It supplies the demands of a groundwood pulp mill at Sheet Harbour, and retails in Sheet Harbour and in Musquodoboit and Stewiacke valleys. The *St. Margaret System* sells power wholesale and retail in Halifax and vicinity. The *Tusket System* sells wholesale in Yarmouth and supplies the demands of the Cosmos Imperial Mills Limited at Yarmouth.

The control of the water resources of the province is vested in the Crown and administered by the Nova Scotia Water Act. The Commission pays the regular fees for water rights in the same proportion as others do who enjoy these privileges.

Financially the Commission is self-supporting, repaying its own borrowed obligations, an item of cost, from revenue. It also has the right to issue securities for money should it be deemed advisable. Expenditure on capital account must be authorized by the Lieutenant-Governor in Council, but replacements are paid for from reserves set up for that purpose.

The balance sheet at Nov. 30, 1938, showed fixed assets of $14,679,822 and work in progress valued at $1,091,737. The total reserves accumulated amounted to $2,789,245.

New Brunswick.—The New Brunswick Electric Power Commission, incorporated under provincial legislation, owns and operates two generating stations: an 11,000-h.p. hydro-electric plant at Musquash, twelve miles west of Saint John; and a 15,000-h.p. plant at Grand lake in the Minto coal area. Transmission lines of 66,000 volts connect the two plants with each other and with the cities of Saint John and Moncton. A 33,000-volt line delivers power from the Grand Lake plant to Fredericton and Marysville. A 66,000-volt line delivers power from the Grand Lake plant to the towns of Newcastle and Chatham.

Power is sold *en bloc* to the cities of Saint John, Moncton, and Fredericton and to the town of Sussex, supplying 18,300 customers in these communities. Power is also distributed directly by the Commission to villages and rural districts, serving directly 11,770 customers. The high-voltage line mileage is 307 and 1,520 miles of distributing lines are in operation. The Commission has under construction rural distribution lines totalling 100 miles in length which will add 400 customers.

The Commission has a plant investment of $8,658,500 and an annual revenue of $1,160,000.

Manitoba.—The Manitoba Power Commission commenced its operations in 1919 under the authority of the Electrical Power Transmission Act. This Act empowered the Commission to make provision for generating electric energy, to enter into contracts for the purchase of power in bulk from generating agencies, and for its transmission and sale to municipalities, corporations, and individuals. Legislation was passed in 1929 by which the Government undertook to pay interest charges and sinking fund charges on an amount not exceeding 50 p.c. of the capital cost of the construction and erection of equipment required for the generation and transmission of electric energy. In 1931 passage of the Electrical Power Transmission Act reorganized the administration of the Commission by establishing a Board and vesting it with additional authority.

The first transmission line was completed in 1920 to serve the city of Portage la Prairie. Power was sold to the city in bulk. With Portage la Prairie as a nucleus, the lines were rapidly extended over the entire southern and western portions of the province, and at the present time the Commission is serving 118 cities, towns, and villages. During this period the Commission took over several municipally-owned plants, notably the plants at Birtle, Brandon, Virden, and Minnedosa. Each of these services has now been tied into the main system and the plants are relegated to standby service. The Commission purchases energy from the municipally-owned plant at Dauphin and distributes it to outlying districts. Power is also purchased from the Winnipeg Electric Company at Selkirk and distributed to the summer resort areas along lake Winnipeg. The Commission has made rapid strides in the promotion of electrical services for farms. The farm rates have been lowered and the cost of building farm extensions has been considerably reduced. In 1937 the Commission made its first incursion into the eastern part of the province, when the towns of Whitemouth and Elma were served. During 1938 the extension of the Commission's network in eastern Manitoba was enlarged by the addition of six new towns in this area.

In 1936 arrangements were completed for the export of a block of power to the Inter-State Power Company at Niche, North Dakota.

The Commission owns and operates a central steam-heating system at Brandon, supplying heat to the business part of the city and to part of the residential section. It also owns and operates the Brandon gas plant.

The object of the Commission is to extend service to any district in which the available revenue is sufficient to justify the necessary capital expenditure. In this connection about 30 inquiries were received by the Commission during 1938 and service was extended to 22 new towns.

Saskatchewan.—The Saskatchewan Power Commission was established in 1929 under the Power Commission Act (R.S.S., 1930, c. 30), authorizing the Commission to manufacture, sell, and supply electric energy, to acquire and develop water-power sites, to acquire or construct steam and oil plants, to construct transmission lines, to purchase power, and to enter into contracts with municipalities for the supply of energy. The Commission is also given certain control and regulatory powers *re* the operation of electrical public utilities, and is charged with the responsibility for the administration of the Electrical Inspection and Licensing Act, 1935 (1934-35, c. 64).

The initial operations of the Commission were concerned with acquiring by purchase municipally-owned plants which were improved, enlarged, or supplemented by installations made by the Commission and were operated as individual systems of supply. Examples of such acquisitions made in 1929 were the Saskatoon, Humboldt, and Rosthern plants, while the plant at Shellbrook, the Wynyard-Elfros-Wadena and the Leader-Prelate-Sceptre Systems, served from plants at Wynyard and Leader, were established by the Commission in the same year. In 1930 the municipal plants at North Battleford, Swift Current, Unity, and Lanigan and the privately-owned plant of the Maple Creek Light, Power and Milling Co. at Maple Creek were acquired, and in 1931 the generating plant at Willowbunch was added. The Watrous-Nokomis System, including ten towns and villages, was also purchased from Canadian Utilities, Ltd., and has been connected with the Bulyea System of the Montreal Engineering Co., Ltd.

Transmission lines run from Saskatoon, as the centre of the main system, easterly to Humboldt, northerly to Shellbrook, and Duck Lake, westerly to Radisson, and southwesterly to Rosetown. Additional lines link Rosetown with Moose Jaw, and Tisdale (where the Commission has a generating plant) with Nipawin. The systems built in 1929 have been extended. All transmission lines supply towns and villages along their courses. By a line built in 1935, service is given to the town of Battleford from the North Battleford plant. At the beginning of 1937 the Commission acquired, by purchase, the municipal plant and distribution system formerly owned by the town of Canora, and installed a new generating unit. Towards the end of the same year 25 miles of transmission line were added to the Tisdale System to serve the centres Arborfield, Aylsham, and Zenon Park. There are now 1,388 miles of transmission lines owned and operated.

The Commission purchases several blocks of power or contracts for the interchange of power from private interests in addition to supplying energy generated at its own plants. The number of consumers served directly in 126 towns and villages is approximately 8,975 and those indirectly served (where the cities operate the distribution systems) number 16,648. The total plant investment as at Dec. 31, 1937, was approximately $7,609,910.

British Columbia.—British Columbia as a province has not, up to the present time, established any commissions for the development and use of water power for the distribution of electric energy. Such power developments as have been undertaken to date have been by private interests or by municipalities. The Water Board, a quasi-judicial body, regulates the rates which are charged by public utility companies.

CHAPTER XIV.—MANUFACTURES.*

This chapter deals with manufacturing industries in Canada under five mian headings: the first, The Evolution of Canadian Manufacturing Industries, shows the historical development of manufacturing in Canada in so far as statistical data are available; the second, Production of Industrial Groups and Individual Industries, gives a detailed treatment of current production under various groupings and individual industries; the third shows the Provincial Distribution of Manufacturing Production under present-day conditions; the fourth analyses the Principal Factors in Manufacturing Production under such sub-headings as capital, employment, salaries and wages, size of establishment, and power and fuel; and the fifth presents statistics of Manufacturing Industries in Cities and Towns.

With regard to the first section dealing with historical development, it has been impossible to compile absolutely comparable statistics over a long period of years. From 1870 to 1915 statistics were collected only in connection with decennial or quinquennial censuses, and there was inevitably some variation in the information collected. The annual Census of Manufactures was instituted in 1917 and, while numerous changes have been made since then in the information collected and the treatment of the data, an effort has been made for the present edition to carry all major revisions, in so far as possible, back to 1917, so that, in the main, the figures for the period since then are on a reasonably comparable basis. Revisions made since publication of the 1938 Year Book are indicated by notes to the tables affected.

Section 1.—The Evolution of Canadian Manufacturing Industries.

The type of manufactures established in a community will, in the beginning, be largely determined, more especially where transportation charges are high, by the raw materials available in that community. For example, the first agricultural process to be carried on by Europeans in what is now the Dominion of Canada was probably the raising of a crop of grain at Port Royal, Nova Scotia, in 1605; the first corresponding manufacturing process was the grinding of the grain in the autumn of that year. Other early manufactures were necessarily connected with the satisfaction of the primary needs of human beings for food, clothing, and shelter, and with the other primary need—protection. It is therefore significant that, at a census of occupations taken in 1681, a comparatively large number of tailors, shoemakers, masons, carpenters, gunsmiths, and edge-tool makers were enumerated.

Since the earliest settlements two main influences have been operating upon the development of manufacturing in Canada: first, the domestic requirements of the growing Canadian population; and secondly, the processing of natural products of Canada to change them to more suitable forms for export. The comparatively small home market, a large part of it in scattered agricultural areas, has always limited the range of goods which may be economically manufactured in Canada for that market. As the Canadian population increases and as the means of distribution improve, the range of goods which may be efficiently manufactured for the home market is being constantly widened, although, as the general standard of living in Canada rises, the variety of fabricated goods for which there is an effective demand within the country is continually expanding, so that there will always be a place in the Canadian market for imports of highly fabricated goods from larger and more intensely industrialized countries.

---

* Revised by A. Cohen, B.Com., Chief, General Manufactures Branch, Dominion Bureau of Statistics. This Branch publishes individual reports on the vegetable products, textile, and miscellaneous manufacturing industries, also reports on the manufacturing industries generally for Canada and the provinces. For a complete list of publications of this Branch, see Chapter XXIX, Section 1, under "Production".

A striking modern feature of manufacture for the home market is the importation of raw materials not indigenous to Canada for the production of goods for which there is a large domestic market. Typical examples are the cotton textile and the rubber goods industries. Furthermore, a large iron and steel industry has grown up in Nova Scotia, Quebec, and Ontario, dependent upon imported iron ore from Newfoundland and the United States.

From the beginning, important manufacturing operations in Canada have been associated with the preparation of natural products for export. Early examples were the curing of fish and furs and the preparation of forest products. In the days of wooden ships, shipbuilding was an important industry along the St. Lawrence and in the Maritime Provinces. Similarly, under modern conditions, the largest industries are mainly based upon the country's natural resources in agriculture, forests, and minerals, while cheap water power is an important factor in the ability of these great manufactures to compete successfully in world markets.

Under modern conditions the major part of our exports of natural products have undergone some manufacturing process before being shipped abroad. Typical examples are: wheat flour, dairy products, and dressed meats arising from the agricultural resources; lumber, shingles, and pulp and paper from the forests; refined metals from the mines of Canada; and cured and canned fish from the Atlantic and Pacific fisheries. The proportions of manufactured goods among Canadian exports may be found in the Condensed Preliminary Report on the Trade of Canada, 1937-38, pp. 34-40, and in Chapter XVI—External Trade—of this volume (see Index under "Trade").

Subsection 1.—Growth of Manufacturing in Canada since 1870.

Growth of Canadian Manufactures Prior to the War.—Until the later '90's, the growth of Canadian manufacturing industries was not particularly rapid, though the great fall in the prices of commodities during the period from 1873 to 1897 was largely responsible for the comparatively slow growth of the gross values of manufactured commodities from $221,600,000 in 1870 to $469,800,000 in 1890, as shown in Table 1. Afterwards there was a change and the prices of commodities commenced to rise, while the industries generally shared in the advantages of the great growing period from 1900 to 1912. The gross product of establishments with five hands or over increased from $368,700,000 in 1890 to $1,166,000,000 in 1910 and to $1,381,500,000 in 1915.

The Influence of the War.—The influence of the War upon the manufactures of Canada was profound and far-reaching, tending to promote the diversification of products and the production at home of many commodities which had previously been imported. On account of the practical suspension of the importation of manufactured goods of many kinds from Europe, enterprising Canadian manufacturers were given opportunities of entering upon new lines of manufacture with practical control of the market. There was added to this the reflex effect of the great prosperity of agriculture, produced by the unprecedented prices of war time, with the general result that industry worked at high pressure. Incidentally, factory methods became more specialized, a high degree of administrative and mechanical efficiency was attained, and Canada became an important industrial country.

Since the annual Census of Manufactures was begun only in 1917, the growth of manufacturing production during the first years of the War cannot be shown in Table **1**. Figures of 1915 are not on a strictly comparable basis with those of later years. However, the effect of the inflation of the war period, which reached its height in the summer of 1920, is evident. The course of manufacturing production thereafter throughout the 1920's is clearly shown in the figures of the table. In 1929 gross values of production exceeded those of 1920, although the prices of manufactured goods had dropped about 41 p.c. in the intervening period.

1.—Historical Summary of Statistics of Manufactures for the Dominion, 1870-1937.

NOTE.—Statistics of the non-ferrous metal smelting industries were included in manufactures for the first time in 1925. Figures for 1917 and subsequent years have been revised since publication of the 1938 Year Book due to the exclusion of the central electric stations and dyeing, cleaning, and laundry industries from the statistics of manufactures.

Year.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.[1]	Gross Value of Products.
	No.	$	No.	$	$	$	$
(All establishments irrespective of the number of employees.)							
1870	41,259	77,964,020	187,942	40,851,009	124,907,846	96,709,927	221,617,773
1880	49,722	165,302,623	254,935	59,429,002	179,918,593	129,757,475	309,676,068
1890	75,964	353,213,000	369,595	100,415,350	250,759,292	219,088,594	469,847,886
(Establishments with five hands or over.)							
1890	14,065	[2]	272,033	79,234,311	[2]	[2]	368,696,723
1900	14,650	446,916,487	339,173	113,249,350	266,527,858	214,525,517	481,053,375
1910	19,218	1,247,583,609	515,203	241,008,416	601,509,018	564,466,621	1,165,975,639
1915	15,593	1,958,705,230	[2]	283,311,505	791,943,433	589,603,792	1,381,517,225
(All establishments irrespective of the number of employees.)[3]							
1917	21,845	2,333,991,229	606,523	497,801,844	1,539,678,811	1,281,131,980	2,820,810,791
1918	21,777	2,518,197,329	602,179	567,991,171	1,827,631,548	1,399,794,849	3,227,426,397
1919	22,083	2,670,559,435	594,066	601,715,668	1,779,056,765	1,442,400,638	3,221,457,403
1920	22,532	2,923,667,011	598,893	717,493,876	2,085,271,649	1,621,273,348	3,706,544,997
1921	21,378	2,705,356,907	445,362	503,550,459	1,366,893,685	1,135,507,250	2,502,400,935
1922	21,016	2,467,493,296	456,256	489,397,230	1,272,651,585	1,103,266,106	2,375,917,691
1923	21,030	2,788,051,636	508,203	549,529,631	1,456,595,367	1,206,332,107	2,662,927,474
1924	20,709	2,895,317,508	437,610	534,467,675	1,422,573,946	1,075,458,459	2,570,561,931
1925[3]	20,981	3,065,730,916	522,924	569,944,442	1,571,788,252	1,167,936,728	2,816,864,958
1926[3]	21,301	3,208,071,197	559,161	625,682,242	1,712,519,991	1,305,168,549	3,100,604,637
1927[3]	21,501	3,454,825,529	595,052	662,705,332	1,741,128,711	1,427,649,292	3,257,214,876
1928[3]	21,973	3,804,062,566	631,429	721,471,634	1,894,027,188	1,597,887,676	3,582,345,302
1929[3]	22,216	4,004,892,009	666,531	777,291,217	2,029,670,813	1,755,386,937	3,883,446,116
1930[3]	22,618	4,041,030,475	614,696	697,555,378	1,664,787,763	1,522,737,125	3,280,236,603
1931	23,083	3,705,701,893	528,640	587,566,990	1,221,911,982	1,252,017,248	2,555,126,448
1932	23,102	3,380,475,509	468,833	473,601,716	954,381,097	955,960,724	1,980,471,543
1933	23,780	3,279,259,838	468,658	436,247,824	967,788,928	919,671,181	1,954,075,785
1934	24,209	3,249,348,864	519,812	503,851,055	1,229,513,621	1,087,301,742	2,393,692,729
1935	24,034	3,216,403,127	556,664	559,467,777	1,419,146,217	1,153,485,104	2,653,911,209
1936	24,202	3,271,263,531	594,359	612,071,434	1,624,213,996	1,289,592,672	3,002,403,814
1937	24,834	3,465,227,831	660,451	721,727,037	2,006,926,787	1,506,624,867	3,623,159,500

[1] In accordance with a resolution passed by the Conference of British Commonwealth Statisticians, 1935, the net value of production is now computed by subtracting the cost of fuel and electricity as well as the cost of materials from the gross value of the products. The figures for 1924 and later years have, therefore, been revised in accordance with this resolution. The revision could not be carried farther back as statistics for cost of electricity are not available for years prior to 1924. [2] Not reported. [3] A change in the method of computing the number of wage-earners in the years 1925 to 1930, inclusive, increased the number somewhat over that which the method otherwise used would have given. In 1931, however, the method in force prior to 1925 was re-adopted. The figures for 1931 and later years are, therefore, comparable with those for 1924 and earlier years.

Effects of the Depression on the Manufacturing Industries of Canada.—The downward trend in manufacturing operations, which began in the fall of 1929, continued with increasing force to about the middle of 1933. As a result, the output of manufactured products in 1933 was lower in value than in any other year since the annual census was begun in 1917 but the wholesale price index for fully and chiefly manufactured goods on the 1926 base declined from 93·0 in 1929 to 70·2 in 1933, and rose only to 73·6 in 1936. That the decline in the volume of manufactures produced was not so great as that of values is evident by comparing the figures of Table **6**, p. 388, with those of Table **3**. Table **8**, p. 390, shows in percentages the effect of the depression on employment, salaries and wages, and gross value of products. Both these analyses indicate that the incidence of the depression affected some industries much more than others. Generally speaking, the production of consumption goods was much better maintained than that of capital goods.

2.—Summary Statistics of Manufactures, by Provinces, for Representative Years, 1917-37.

NOTE.—Figures have been revised since the publication of the 1938 Year Book; see headnote to Table **1**.

Year and Province.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.[1]	Gross Value of Products.
	No.	$	No.	$	$	$	$
1917.							
Canada	**21,845**	**2,333,991,229**	**606,523**	**497,801,844**	**1,539,678,811**	**1,281,131,980**	**2,820,810,791**
P.E. Island	411	2,008,082	1,556	663,251	3,087,621	1,750,135	4,837,756
Nova Scotia	1,337	124,357,851	25,252	18,838,051	102,415,215	57,565,703	159,980,918
New Brunswick	943	60,301,007	19,710	12,893,014	32,380,621	27,027,725	59,408,346
Quebec	7,032	662,012,875	188,040	141,007,616	385,212,984	380,882,409	766,095,393
Ontario	9,061	1,157,850,643	299,842	258,891,136	794,556,502	662,174,261	1,456,730,763
Manitoba	732	82,566,858	18,939	16,513,423	69,715,149	42,280,801	111,995,950
Saskatchewan	560	24,372,585	6,230	5,402,332	22,040,674	13,894,179	35,934,853
Alberta	636	49,146,241	9,464	8,662,417	42,632,212	23,883,673	66,515,885
B.C. and Yukon	1,133	171,375,087	37,490	34,930,604	87,637,833	71,673,094	159,310,927
1920.							
Canada	**22,532**	**2,923,667,011**	**598,893**	**717,493,876**	**2,085,271,649**	**1,621,273,348**	**3,706,544,997**
P.E. Island	373	2,328,686	1,286	855,210	4,164,223	2,135,857	6,300,080
Nova Scotia	1,343	135,679,188	23,424	25,625,089	85,724,785	61,371,243	147,096,028
New Brunswick	901	101,216,395	19,007	19,266,821	60,812,641	45,803,164	106,615,805
Quebec	7,530	878,859,638	183,748	202,516,550	553,558,520	499,643,217	1,053,201,737
Ontario	9,113	1,464,097,346	295,674	362,941,317	1,071,843,374	792,267,562	1,864,110,936
Manitoba	745	94,424,145	23,727	32,372,081	92,729,271	62,776,912	155,506,183
Saskatchewan	556	24,640,520	6,769	9,657,478	34,894,105	22,610,861	57,504,966
Alberta	666	48,310,655	10,960	15,218,013	56,139,646	29,812,891	85,952,537
B.C. and Yukon	1,305	174,110,438	34,298	49,041,317	125,405,084	104,851,641	230,256,725
1922.							
Canada	**21,016**	**2,667,493,290**	**456,256**	**489,397,230**	**1,272,651,585**	**1,103,266,106**	**2,375,917,691**
P.E. Island	340	2,446,574	1,086	593,660	2,620,235	1,660,282	4,280,517
Nova Scotia	1,092	98,117,897	13,678	11,586,235	37,980,329	27,516,271	65,496,600
New Brunswick	846	77,036,627	13.934	11,801,670	38,032,967	25,163,444	63,196,411
Quebec	7,190	800,859,568	143,584	139,876,821	333,298,544	346,020,126	679,318,670
Ontario	8,703	1,400,041,955	235,070	265,818,003	674,025,732	572,098,704	1,246,124,436
Manitoba	697	65,172,676	13,076	16,853,345	54,373,811	36,842,899	91.216,710
Saskatchewan	490	22,734,469	3,494	4,734,885	22,366,129	13,186,266	35,552,395
Alberta	556	41,154,178	6,516	8,293,572	30,189,648	18,939,659	49,129,307
B.C. and Yukon	1,102	159,929,346	25,818	29,839,039	79,764,190	61,838,455	141,602,645
1926.[2]							
Canada	**21,301**	**3,208,071,197**	**559,161**	**625,682,242**	**1,712,519,991**	**1,305,168,549**	**3,100,601,637**
P.E. Island	287	2,186,192	2,215	651,891	2,636,617	1,174,803	3,893,651
Nova Scotia	1,077	105,243,253	16,099	12,294,112	39,094,533	28,425,438	70,341,089
New Brunswick	849	85,068,236	17,211	14,149,648	44,038,338	25,890,931	71,898,758
Quebec	6,919	967,453,188	174,988	182,867,362	439,344,919	399,990,947	865,719,634
Ontario	8,898	1,618,824,058	270,676	322,040,731	896,984,983	667,058,655	1,604,765,985
Manitoba	743	87,873,743	19,736	25,053,527	74,647,339	48,878,988	125,767,089
Saskatchewan	517	24,280,453	4,213	5,533,340	29,057,333	13,365,571	43,462,179
Alberta	640	56,346,245	9,088	11,403,539	49,708,921	27,632,183	78,675,108
B.C. and Yukon	1,371	260,795,829	44,935	51,688,092	137,007,008	92,751,033	236,081,144

---

[1] See footnote 1, Table **1**, p. 379.

[2] See footnote 3, Table **1**, p. 379.

2.—Summary Statistics of Manufactures, by Provinces, for Representative Years, 1917-37—concluded.

Year and Province.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.[1]	Gross Value of Products.
	No.	$	No.	$	$	$	$
1929.[2]							
Canada	**22,216**	**4,001,892,099**	**666,531**	**777,291,217**	**2,029,670,813**	**1,755,386,937**	**3,883,446,116**
P.E. Island	263	2,646,354	2,074	727,286	2,862,725	1,466,446	4,408,608
Nova Scotia	1,094	118,951,398	19,986	16,905,885	50,725,562	35,676,421	89,787,548
New Brunswick	803	91,376,948	17,952	15,127,716	39,800,366	26,640,786	68,145,012
Quebec	6,948	1,246,208,650	206,580	225,226,808	537,270,055	537,796,395	1,108,592,775
Ontario	9,348	1,986,736,556	328,533	406,622,627	1,056,530,202	916,971,816	2,020,492,433
Manitoba	861	121,363,898	24,012	31,224,596	87,832,324	63,925,015	155,266,294
Saskatchewan	594	43,925,797	7,025	9,105,597	51,003,566	23,002,952	75,368,605
Alberta	736	81,875,952	12,216	14,585,734	62,500,175	36,824,969	100,966,196
B.C. and Yukon	1,569	311,806,456	48,153	57,764,968	141,145,838	113,082,137	260,418,645
1930.[2]							
Canada	**22,618**	**4,041,030,475**	**614,696**	**697,555,378**	**1,664,787,763**	**1,522,737,125**	**3,280,236,603**
P.E. Island	253	2,614,040	1,981	723,981	2,544,716	1,367,340	3,995,207
Nova Scotia	1,197	107,128,903	19,940	16,269,451	44,450,933	33,565,726	81,428,691
New Brunswick	867	112,840,644	17,742	14,303,224	33,853,418	24,051,688	60,169,932
Quebec	7,195	1,275,067,529	197,207	207,438,809	461,705,366	479,054,474	973,175,856
Ontario	9,315	1,980,604,670	295,593	354,328,542	835,842,111	776,909,888	1,655,006,362
Manitoba	876	126,806,801	24,003	30,876,043	74,535,962	56,007,805	133,845,947
Saskatchewan	591	41,602,686	6,137	7,825,229	35,493,353	20,018,476	56,806,380
Alberta	758	81,272,088	12,625	15,252,446	53,460,736	33,291,587	88,361,723
B.C. and Yukon	1,566	313,093,114	39,468	50,537,653	122,901,168	98,470,141	227.446,505
1933.							
Canada	**23,780**	**3,279,259,838**	**468,658**	**436,247,824**	**967,788,928**	**919,671,181**	**1,954,075,785**
P.E. Island	249	2,256,307	991	529,684	1,590,834	1,126,826	2,775,787
Nova Scotia	1,277	92,004,624	12,211	9,604,680	25,354,319	19,988,257	47,912,432
New Brunswick	747	90,148,317	11,336	9,308,100	20,442,421	18,166,713	41,345,622
Quebec	7,856	1,035,339,591	157,481	134,696,386	292,560,568	288,504,782	604,496,078
Ontario	9,542	1,587,947,94	224,816	220,530,088	464,544,563	465,103,842	958,776,858
Manitoba	1,010	100,074,404	18,871	18,687,430	44,579,998	37,390,275	83,934,777
Saskatchewan	673	38,688,433	4,782	4,848,763	19,124,030	11,478,634	31,559,387
Alberta	874	69,604,563	9,753	9,573,468	29,425,975	18,876,929	49,395,514
B.C. and Yukon	1,552	263,195,652	28,417	28,469,225	70,166,220	59,034.923	133,879,330
1935.							
Canada	**24,034**	**3,216,403,127**	**556,664**	**559,467,777**	**1,419,146,217**	**1,153,485,104**	**2,653,911,209**
P.E. Island	247	2,318,305	1,025	547,019	1,892,578	1,098,551	3,047,130
Nova Scotia	1,252	87,396,597	14,870	12,853,724	31,592,708	26,186,396	61,442,272
New Brunswick	819	82,974,755	13,237	11,050,094	25,519,777	24,287,140	52,771,784
Quebec	7,727	1,014,479,736	182,987	165,833,586	398,110,681	342,615,835	769,094,602
Ontario	9,636	1,542,657,257	270,449	289,982,198	717,862,532	609,641,993	1,363,185,363
Manitoba	1,035	116,127,822	21,196	22,403,193	67,756,585	39,559,035	109,621,432
Saskatchewan	740	39,915,044	5,547	5,548,729	27,987,307	13,035,785	42,031,223
Alberta	908	68,110,643	11,029	11,268,681	42,762,450	23,769,306	67,830,918
B.C. and Yukon	1,670	262,422,968	36,324	39,980,553	105,661,599	73,291,063	184,886,485
1936.							
Canada	**24,202**	**3,271,263,531**	**594,359**	**612,071,434**	**1,624,213,996**	**1,289,592,672**	**3,002,403,814**
P.E. Island	233	2,394,532	996	553,008	2,200,028	1,055.201	3,311,223
Nova Scotia	1,158	87,888,353	15,944	13,784,556	36,077,900	27,788,510	67,784,970
New Brunswick	784	81,468,098	13,710	11,855,051	29,292,851	23,781,487	56,225,201
Quebec	7,969	1,029,546,039	194,876	182,319,454	455,027,759	377,514,998	863,687,389
Ontario	9,753	1,588,484,130	288,992	314,872,843	822,884,081	686,470,917	1,547,551,931
Manitoba	1,011	118,515,841	22,507	24,490,299	74,374,078	45,015,577	122,050,502
Saskatchewan	694	42.055,557	5,782	6,013,378	35,311,152	15,185,500	51,604,510
Alberta	905	70,224,578	11,756	12,328,471	47,684,029	25,000,136	74,052,010
B.C. and Yukon	1,695	250,686,403	39,796	45,854,374	121,362,118	87,780,346	216,136,078
1937.							
Canada	**24,834**	**3,465,227,831**	**660,451**	**721,727,037**	**2,006,926,787**	**1,506,624,867**	**3,623,159,500**
P.E. Island	240	2,637.472	1,062	607,547	2,386,091	1,117,298	3,566,991
Nova Scotia	1,135	94,756,601	18,088	16,727,338	46,964,053	33,146,796	84,393,656
New Brunswick	805	89,797,597	15,612	14,563,310	36,983,284	28,770,727	69,479,207
Quebec	8,518	1,117,772,721	219,033	216,971,207	562,889,160	445,885,666	1,046,470,796
Ontario	9,796	1,674,806,201	321,743	373,018,048	1,025,871,741	802,403,114	1,878,088,188
Manitoba	1,043	119,363,026	23,706	27,198,978	87,684,514	49,950,465	140,805,451
Saskatchewan	689	39,279,050	6,107	6,758,154	43,782,999	17,068,655	62,205,884
Alberta	895	70,804,070	12,524	13,903,062	55,898,599	28,923,095	86,225,069
B.C. and Yukon	1,713	256,011,093	42,576	51,979,393	144,466,346	99,359,051	251,924,258

[1] See footnote 1, Table 1, p. 379.

[2] See footnote 3, Table 1, p. 379

3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-37.

NOTE.—Figures have been revised since the publication of the 1938 Year Book; see headnote to Table 1, p. 379.

Year and Industrial Group.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.[1]	Gross Value of Products.
	No.	$	No.	$	$	$	$
1917.							
Totals	**21,845**	**2,333,991,229**	**606,523**	**497,801,844**	**1,539,678,811**	**1,281,131,980**	**2,820,810,791**
Vegetable products	4,151	279,627,827	62,791	45,916,557	367,214,061	183,782,501	550,996,562
Animal products	5,486	207,165,245	46,994	35,753,133	320,302,039	124,103,990	444,406,029
Textile products	1,033	190.664,564	76,315	47,386,592	131,071,158	109,227,157	240,298,315
Wood and paper	7,258	538,022,224	153,701	115,198,434	150,122,143	249,201,596	399,323,739
Iron products	1,495	695,677,552	161,745	161,875,426	378,193,116	371,792,489	749,985,605
Non-ferrous metals	296	69,421,911	18,220	15,898,890	46,445,469	41,039,351	87,484,820
Non-metallic minerals	1,075	145,423,082	20,781	18,224,724	36,994,392	58,092,396	95,086,788
Chemicals	539	175,836,690	56,153	51,505,484	99,068,092	131,381,995	230,450,087
Miscellaneous industries	512	32,152,134	9,823	6,042,604	10,268,341	12,510,505	22.778,846
1920.							
Totals	**22,532**	**2,923,667,011**	**598,893**	**717,493,876**	**2,085,271,649**	**1,621,273,348**	**3,706,544,997**
Vegetable products	4,549	402,383,047	74,241	77,750,189	536,828,044	239,328,371	776,156,415
Animal products	4,823	221,792,457	48,687	54,291,606	400,496,354	152,995,130	553,491,484
Textile products	1,304	302,758,185	87,730	84,433,609	256,233,300	173,741,035	429,974,335
Wood and paper	7,881	774,937,232	144,391	172,368,578	309,813,724	417,256,115	727,069,839
Iron products	1,789	726,371,335	164,087	231,595,911	377,499,134	411,875,057	789,374,191
Non-ferrous metals	324	109,382,033	23,162	27,895,343	48,434,120	52,847,178	101,281,298
Non-metallic minerals	846	215,281,921	25,500	32,351,764	69,856,558	80,205,472	150,062,030
Chemicals	464	122,123,730	17,653	22,193,421	62.644,608	65,183,212	127,827,820
Miscellaneous industries	552	48,637,071	13,442	14,613,455	23,465,807	27,841,778	51,307,585
1922.							
Totals	**21,016**	**2,667,493,290**	**456,256**	**489,397,230**	**1,272,651,585**	**1,103,266,106**	**2,375,917,691**
Vegetable products	4,638	379,567,139	64,753	66,228,286	333.295,009	210,835,301	544,130,310
Animal products	5,118	201,829,414	49,595	49,933,679	264,078,631	107,473,382	371,552,013
Textile products	1,089	259,324,870	80,558	69,685,529	151,333,320	142,577,057	293,910,377
Wood and paper	6,966	761,020,831	118,364	132,092,249	206,860,089	283,006,200	489,866,289
Iron products	1,083	567,011,222	78,565	95,443,053	171,529,909	170,769,391	342,299,300
Non-ferrous metals	325	102,208,275	18,222	21,451,629	30,861,895	39,993,798	70,855,693
Non-metallic minerals	812	230.486,004	20.932	25,401,278	60,671,305	74,022,607	134,693,912
Chemicals	469	118,025,483	14,082	16,770,503	37,650,061	48,981,277	86,631,338
Miscellaneous industries	516	48,020,052	11,185	12,391,024	16,371,366	25,607,093	41,978,459
1926.[2]							
Totals	**21,301**	**3,208,071,197**	**559,161**	**625,682,242**	**1,712,519,991**	**1,305,168,549**	**3,100,604,637**
Vegetable products	4,876	459,954,621	75,599	77,228,907	417,369,891	238,526,689	665,727,220
Animal products	4,896	223,938,559	67,843	60,203,986	329,114,267	118,071,730	452,034,925
Textile products	1,348	299,997,102	91,600	80,371,061	200,728,207	143,682,701	348,692,376
Wood and paper	6,741	928,531,443	134,035	160,800,772	260,538,320	314,716,662	599,623,525
Iron products	1,195	655,489,290	111,258	148,150,243	270,730,832	250,312,216	534,191.465
Non-ferrous metals	403	202,503,426	30,095	39,201,147	90,613,004	84,993,291	183,501,723
Non-metallic minerals	893	251,028,657	24,354	30,107,628	79,239,842	73,294,971	166,750,419
Chemicals	556	133,407,891	14,345	18,309,377	46,124,557	58,630,323	108,500,933
Miscellaneous industries	393	53,220,208	10,032	11,309,121	18,061,071	22,939,966	41,582,051
1929.[2]							
Totals	**22,216**	**4,004,892,009**	**666,531**	**777,291,217**	**2,029,670,813**	**1,755,386,937**	**3,883,446,116**
Vegetable products	5,350	581,820,861	91,032	95,853,121	431,595,751	341,688,938	783,706,883
Animal products	4,490	243,825,065	67,670	62,081,423	345,351,882	127,929,857	477,761,855
Textile products	1,534	360,762,584	103,881	94,969,433	217,954,088	180,469,064	403,205,809
Wood and paper	7,392	1,151,463,962	164,572	192,088,948	313,797,201	381,485,477	724,972,308
Iron products	1,224	826,063,942	142,772	203,740,658	405,818,468	367,465,582	790,726,338
Non-ferrous metals	408	298,721,106	39,867	54,501,806	124,900,632	150,415,215	283,545,666
Non-metallic minerals	843	316,692,818	29,257	38,958,390	112,573,103	99,065,847	229,774,300
Chemicals	554	165,886,912	16,694	22,639,449	55,184,337	78,785,911	138,545,221
Miscellaneous industries	421	59,654,759	10,786	12,457,989	22,495,351	28,081,046	51,207,736

---

[1] See footnote 1, Table 1, p. 379.

[2] See footnote 3, Table 1, p. 379.

3.—Summary Statistics of Manufactures, by Industrial Groups, for Representative Years, 1917-37—concluded.

Year and Industrial Group.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Net Value of Products.[1]	Gross Value of Products.
	No.	$	No.	$	$	$	$
1930.[2]							
Totals	**22,618**	**4,041,030,475**	**614,696**	**697,555,378**	**1,664,787,763**	**1,522,737,125**	**3,280,236,603**
Vegetable products	5,426	584,338,567	86,622	88,303,694	361,177,542	314,597,138	685,574,073
Animal products	4,341	233,334,972	57,657	55,564,398	285,328,411	127,929,546	417,540,878
Textile products	1,518	344,481,374	97,691	86,653,151	182,367,726	152,173,075	339,118,853
Wood and paper	7,799	1,219,835,569	156,377	174,099,699	267,690,284	337,297,414	635,286,712
Iron products	1,245	791,495,989	125,365	172,893,150	287,140,960	285,943,762	587,884,700
Non-ferrous metals	429	325,605,549	38,756	52,319,027	111,738,411	130,320,719	250,458,721
Non-metallic minerals	849	321,084,124	27,428	36,196,714	103,539,472	83,751,500	203,262,420
Chemicals	591	168,119,152	15,503	21,041,789	48,165,038	67,798,313	119,969,637
Miscellaneous industries	420	52,735,179	9,297	10,483,756	17,639,919	22,925,658	41,140,609
1933.							
Totals	**23,780**	**3,279,259,838**	**468,658**	**436,247,824**	**967,788,928**	**919,671,181**	**1,954,075,785**
Vegetable products	5,916	522,389,736	75,416	68,535,349	226,879,373	196,820,952	432,315,617
Animal products	4,496	201,993,642	53,111	46,453,188	179,429,948	87,629,444	271,068,210
Textile products	1,740	298,730,436	95,707	72,813,424	143,184,861	131,065,992	279,475,267
Wood and paper	7,891	892,652,622	105,080	102,218,652	134,663,641	184,233,540	341,336,701
Iron products	1,334	614,632,403	73,348	72,296,179	98,793,191	109,198,169	216,828,992
Non-ferrous metals	478	266,266,443	25,273	28,099,026	71,990,608	88,427,984	164,765,604
Non-metallic minerals	770	295,139,543	16,975	19,282,401	69,077,701	52,817,078	131,325,706
Chemicals	696	153,900,930	15,397	18,738,629	34,271,854	55,394,284	92,820,761
Miscellaneous industries	459	33,554,083	8,351	7,810,976	9,497,751	14,083,738	24,138,927
1935.							
Totals	**24,034**	**3,216,403,127**	**556,664**	**559,467,777**	**1,419,146,217**	**1,153,485,104**	**2,653,911,209**
Vegetable products	5,803	508,751,881	82,155	77,766,018	287,579,561	226,844,633	523,673,927
Animal products	4,402	211,672,508	60,124	54,035,134	247,375,247	99,633,595	351,643,587
Textile products	1,859	306,429,696	109,947	88,235,820	182,181,502	152,594,573	340,795,016
Wood and paper	8,149	872,228,671	123,011	127,636,239	174,296,519	238,463,072	439,463,693
Iron products	1,295	584,876,842	98,687	114,032,544	206,365,693	179,151,863	398,401,070
Non-ferrous metals	505	261,625,967	33,613	40,315,477	174,906,971	107,898,470	288,523,250
Non-metallic minerals	787	287,960,329	20,472	24,518,653	85,072,254	66,053,236	162,332,932
Chemicals	734	147,472,534	18,933	23,715,305	48,316,876	66,001,290	118,574,228
Miscellaneous industries	500	35,384,699	9,722	9,212,587	13,051,594	16,844,372	30,503,506
1936.							
Totals	**24,202**	**3,271,263,531**	**594,359**	**612,071,434**	**1,624,213,996**	**1,289,592,672**	**3,002,403,814**
Vegetable products	5,824	524,164,493	87,071	84,397,961	333,562,766	254,135,013	597,461,635
Animal products	4,433	222,299,844	63,609	57,829,529	283,265,546	109,823,848	397,955,241
Textile products	1,879	316,273,003	114,966	95,016,170	197,336,683	162,677,272	366,285,008
Wood and paper	8,175	874,592,781	132,374	141,301,340	205,978,921	261,020,034	497,103,666
Iron products	1,317	600,424,322	107,203	126,537,657	227,886,781	211,572,641	453,385,553
Non-ferrous metals	512	266,322,074	36,935	45,091,191	212,783,636	132,423,707	351,164,860
Non-metallic minerals	803	282,596,535	21,974	26,402,410	96,534,218	68,707,776	177,771,597
Chemicals	745	147,664,533	19,910	25,227,267	52,482,873	69,854,217	126,874,791
Miscellaneous industries	514	36,925,946	10,317	10,267,909	14,382,572	19,378,164	34,401,463
1937.							
Totals	**24,834**	**3,465,227,831**	**660,451**	**721,727,037**	**2,006,926,787**	**1,506,624,867**	**3,623,159,500**
Vegetable products	5,968	539,531,357	94,258	94,632,901	395,491,147	266,869,693	672,540,163
Animal products	4,435	230,312,163	67,996	64,816,361	326,537,087	118,117,971	449,783,908
Textile products	1,941	322,204,180	121,677	105,056,051	219,813,775	174,076.945	400,383.726
Wood and paper	8,497	927,070,757	147,254	165,298,485	256,269,941	306,961,553	597,061,878
Iron products	1,345	651,398,528	127,148	163,261,130	328,091,063	277,865,582	622,519,877
Non-ferrous metals	526	306,522,643	44,614	57,722,728	282,532,128	182,968,223	482,440,562
Non-metallic minerals	823	287,473,542	23,837	30,389,958	115,938,578	77,667,225	208,205,148
Chemicals	754	161,165,068	21,968	28,612,719	64,460,947	79,290,240	148,973,220
Miscellaneous industries	545	39,549,593	11,699	11,936,704	17,792,121	22,807,435	41,251,018

---

[1] See footnote 1, Table **1**, p. 379. [2] See footnote 3, Table **1**, p. 379.

Summary Statistics of Manufactures.—In Table 4 will be found an analysis of the most important statistics of manufactures for the period 1917 to 1937, brought together in order that the tendencies in Canadian manufacturing industries may be traced as clearly as possible through this latest period of their development. In analysing statistics of production and materials used, it should be borne in mind that, due to the inflation of values during the War and immediate post-war periods and the drop in prices of commodities during the depressions of 1921 and 1930, the figures for these years are not completely comparable. One very important figure, however, which shows the trend of development clearly and uninterruptedly, is concerned with the use of power. The total horse-power employed increased from 1,658,475 in 1917 to 4,461,867 in 1936, an increase of 169 p.c. in nineteen years. In the same period horse-power per wage-earner increased from 3·06 to 9·11, indicating the rapidly increasing utilization of electric power in manufacturing production. The significant feature is the increase in both the absolute figures of power employed and the average per wage-earner during the depression years as compared with 1929, although the large numbers of persons again finding employment since 1933 have reduced the averages for later years. Another interesting comparison is the trend of value added by manufacture per employee and of average salaries and wages paid since 1929. Compared with 1917, the figures for average salaries and wages per employee in 1937 represent an increase of 33·1 p.c., while the estimated increase in the value added by manufacture per employee was only 8·0 p.c. Wholesale prices of commodities declined 26·0 p.c. in the same period.

Consumption of Manufactured Products.—One of the beneficial results of placing the classification of external trade and of production upon a common basis is exhibited in Table 5, where the value of commodities made available for consumption in Canada is derived from the statistics of the two important fields. For example, the value of all manufactured commodities made available in a period approximately corresponding to 1936 was $2,794,000,000, a figure obtained by adding to the value of manufactured products in 1936 the value of the imports of manufactured and partly manufactured goods during the fiscal year ended Mar. 31, 1937, and deducting the value of the corresponding exports for the same period. In this table more accurate statistics could be presented were it possible to exclude from the gross value of manufactured products the duplications involved when the products of one manufacturing establishment become the materials worked upon in another. Vegetable, iron, textile, animal, and wood and paper products were, in that order, the leading groups in the value of finished goods made available for consumption. The large amount of manufactured vegetable products made available for consumption was due to the large domestic production, as the exports and imports were about equal, while manufactures of textiles and iron and steel products, in addition to a large production, showed an excess of imports over exports of $59,000,000 and $92,000,000, respectively. Wood and paper, animal, and non-ferrous metal products were manufactured in Canada in greater quantities than required for home consumption, providing export balances in these groups.

In 1929, the order of the groups by the values available for consumption was iron, vegetable, textile, wood and paper, and animal products. Since 1929 the consumption of vegetable, animal, chemical, and textile products has been much better maintained than that of iron, non-metallic mineral, and wood products.

4.—Summary Statistics of Manufactures for Representative Years, 1917-37.

NOTE.—Figures have been revised since publication of the 1938 Year Book; see headnote, Table 1, p. 379.

Item.	1917.	1920.	1926.[1]	1929.[1]	1930.[1]	1933.	1935.	1936.	1937.
Establishments..................No.	21,845	22,532	21,301	22,216	22,618	23,780	24,034	24,202	24,834
Capital.......................... $	2,333,991,229	2,923,667,011	3,208,071,197	4,004,892,009	4,041,030,475	3,279,259,838	3,216,403,127	3,271,263,531	3,465,227,831
Averages, per establishment... $	106,843	129,756	150,607	180,271	178,664	137,900	133,827	135,165	139,536
Averages, per employee....... $	3,848	4,882	5,737	6,009	6,574	6,997	5,778	5,504	5,247
Averages, per wage-earner..... $	4,309	5,616	6,631	6,933	7,625	8,584	7,011	6.677	6,363
Totals, employees..............No.	606,523	598,893	559,161	666,531	614,696	468,658	556,664	594,359	660,451
Averages, per establishment...No.	27·8	26·6	26·3	30·0	27·2	19·7	23·2	24·6	26·6
Totals, salaries and wages....... $	497,801,844	717,493,876	625,682,242	777,291,217	697,555,378	436,247,824	559,467,777	612,071,434	721,727,037
Averages, per establishment... $	22,788	31,843	29,373	34,988	30,841	18,345	23,278	25,290	29,062
Averages, per employee....... $	821	1,198	1,119	1,166	1,135	931	1,005	1,030	1,093
Employees on salaries...........No.	64,918	78,334	75,337	88,841	84,711	86,636	97,930	104,417	115,827
Averages, per establishment...No.	3·0	3·5	3·5	4·0	3·7	3·6	4·1	4·3	4·7
Salaries.......................... $	85,353,667	141,837,361	142,353,900	175,553,710	169,992,216	139,317,946	160,455,080	173,198,057	195,983,475
Averages, salaries............. $	1,315	1,811	1,890	1,976	2,007	1,608	1,638	1,659	1,692
Employees on wages.............No.	541,605	520,559	483,824	577,690	529,985	382,022	458,734	489,942	544,624
Averages, per establishment...No.	24·8	23·1	22·7	26·0	23·4	16·1	19·1	20·2	21·9
Wages.......................... $	412,448,177	575,656,515	483,328,342	601,737,507	527,563,162	296,929,878	399,012,697	438,873,377	525,743,562
Averages, wages............... $	762	1,106	999	1,042	995	777	870	896	965
Cost of materials................ $	1,539,678,811	2,085,271,649	1,712,519,991	2,029,670,813	1,664,787,763	967,788,928	1,419,146,217	1,624,213,996	2,006,926,787
Averages, per establishment... $	70,482	92,547	80,396	91,361	73,605	40,698	59,047	67,111	80,814
Averages, per employee....... $	2,539	3,482	3,063	3,045	2,708	2,065	2,549	2,733	3,039
Values added in manufacture[2].... $	1,281,131,980	1,621,273,348	1,305,168,549	1,755,386,937	1,522,737,125	919,671,181	1,153,485,104	1,289,592,672	1,506,624,867
Averages, per establishment[2].. $	58,646	71,954	61,273	79,015	67,324	38,674	47,994	53,285	60,668
Averages, per employee[2]....... $	2,112	2,707	2,334	2,634	2,477	1,962	2,072	2,170	2,281
Gross values of products......... $	2,820,810,791	3,706,544,997	3,100,604,637	3,883,446,116	3,280,236,603	1,954,075,785	2,653,911,209	3,002,403,814	3,623,159,500
Averages, per establishment... $	129,128	164,501	145,561	174,804	145,028	82,173	110,423	124,056	145,895
Averages, per employee....... $	4,651	6,189	5,545	5,826	5,336	4,170	4,768	5,051	5,486
Power employed................h.p.	1,658,475	2,068,875	3,122,377	3,855,648	4,039,007	4,135,008	4,331,488	4,461,867	[3]
Averages, per establishment...h.p.	76	92	147	174	179	174	180	184	[3]
Averages, per wage-earner.....h.p.	3·06	3·97	6·45	6·67	7·62	10·82	9·44	9·11	[3]

[1] A change in the method of computing the number of wage-earners in the years 1925 to 1930, inclusive, increased the number somewhat over that which the method otherwise used would have given. There was, therefore, a proportionate reduction in the averages for 1925-30 per employee and wage-earner, as compared with what these averages would have been under the other method. In 1931, however, the method in force prior to 1925 was re-adopted. The figures for 1931 and later years are, therefore, comparable with those for 1924 and earlier years.

[2] Net values of products; see footnote 1, Table 1, p. 379.

[3] Not available at time of going to press.

5.—Consumption of Manufactured Products, by Groups, 1936, with Totals for 1922-35.

Note.—Statistics of manufacturing production are for the calendar year. Imports and exports of manufactured and partly manufactured goods are for the fiscal years ended Mar. 31 of the following years. Figures have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Year and Industrial Group.	Value of Products Manufactured.	Manufactured and Partly Manufactured Goods.		Value of Manufactured Products Available for Consumption.[1]
		Value of Net Imports.[1]	Value of Domestic Exports.	
	$	$	$	$
Totals, 1922	**2,375,917,691**	**574,551,323**	**515,173,415**	**2,435,295,599**
Totals, 1923	**2,662,927,474**	**639,343,645**	**591,829,306**	**2,710,441,813**
Totals, 1924	**2,570,561,931**	**576,031,243**	**591,598,479**	**2,554,994,695**
Totals, 1925	**2,816,864,958**	**671,462,940**	**695,325,245**	**2,793,002,653**
Totals, 1926	**3,100,604,637**	**767,022,008**	**673,709,266**	**3,193,917,379**
Totals, 1927	**3,257,214,876**	**825,147,919**	**648,178,000**	**3,434,184,795**
Totals, 1928	**3,582,345,302**	**954,387,551**	**698,376,615**	**3,838,356,238**
Totals, 1929	**3,883,446,116**	**939,130,201**	**686,876,071**	**4,135,700,246**
Totals, 1930	**3,280,236,603**	**675,828,233**	**490,108,470**	**3,465,956,366**
Totals, 1931	**2,555,126,448**	**423,519,849**	**347,456,198**	**2,631,190,099**
Totals, 1932	**1,980,471,543**	**281,855,757**	**267,765,614**	**1,994,561,686**
Totals, 1933	**1,954,075,785**	**298,068,344**	**365,232,113**	**1,886,912,016**
Totals, 1934	**2,393,692,729**	**357,320,234**	**419,094,297**	**2,331,918,716**
Totals, 1935	**2,653,911,209**	**385,597,041**	**582,041,141**	**2,457,467,109**
INDUSTRIAL GROUP, 1936.				
Vegetable products	597,461,635	71.527,058	81,335,926	587,652,767
Animal products	397,955,241	14,159,398	74,635,932	337,478,707
Textiles and textile products	366,285,008	69,914,302	10,522,750	425,676,560
Wood and paper products	497,103,666	28,223,676	209,238,665	316,088,677
Iron and its products	453,385,553	145,750,909	53,161,836	545,974,626
Non-ferrous metal products	351,164,860	31,139,972	205,847,124	176,457,708
Non-metallic mineral products	177,771,597	35,838,466	11,278,104	202,331,959
Chemicals and allied products	126,874,791	32,808,279	19,237,697	140,445,373
Miscellaneous industries	34,401,463	39,093,921	11,632,769	61,862,615
Totals, 1936	**3,002,403,814**	**468,455,981**	**676,890,803**	**2,793,968,992**

[1] Net imports are total imports less foreign products re-exported. For 1928 to 1936 foreign products imported and later re-exported are eliminated from the value of products available for consumption, but for 1927 and previous years this was impossible, since foreign exports for these years had never been analysed as raw materials or partly or fully manufactured goods. Therefore in this table the value of manufactured products made available for consumption, for the years 1922 to 1927, inclusive, is an overstatement by the amount of the foreign exports of manufactured goods in each year, probably varying from about $11,000,000 in 1922 to $18,000,000 in 1927.

Subsection 2.—Value and Volume of Manufactured Products.

Value of Products.—In the presentation of manufacturing statistics, the value of products is given in two forms, namely, gross value and net value or the value added by manufacturing processes. Formerly this figure of net value was obtained by deducting only the cost of materials from the gross value. However, in accordance with a resolution passed by the Conference of British Commonwealth Statisticians in 1935, the net value is now computed by subtracting the cost of fuel and electricity consumed, as well as the cost of materials used, from the gross value of products. Statistics of cost of electricity are not available prior to 1924, but in the present edition the figures for 1924 and later years have been revised in accordance with the above resolution.

Values are affected by fluctuations in price levels as well as changes in the volume of output. Therefore, in the interpretation of manufacturing values over a number of years, variations in the level of prices must be borne in mind, especially when such variations have been as great as those in the period since the annual Census of Manufactures was begun in 1917. The index number of wholesale prices in Canada, on the 1926 base, compiled by the Dominion Bureau of Statistics, stood at

114·3 in 1917, 155·9 in 1920, 97·3 in 1922, 95·6 in 1929, 67·1 in 1933, and 84·6 in 1937. (See under "wholesale prices" in Index.) Index numbers of the prices of fully or chiefly manufactured goods were: 113·5 in 1917, 156·5 in 1920, 100·4 in 1922, 93·0 in 1929, 70·2 in 1933, and 73·6 in 1936.

Volume of Manufacturing Production in Recent Years.*—An investigation of the greatest importance, especially in a period when values are rapidly changing, is that of the volume of manufacturing production as distinguished from its value. Since real income is ultimately measured in goods and services, the growth of the volume of manufactures becomes a matter of great significance. The important thing to know is whether consumers are getting more goods and services, not whether they are expending more dollars and cents.

The index of volume is based on the quantities of manufactured products reported and includes 71·1 p.c. of the total value of the production in 1926. It is weighted according to the values added by manufacture in 1926. A complete description of the manner in which the index is constructed will be found in the publication referred to in the footnote to this page.

The physical volume of manufacturing production increased 50·2 p.c. from 1923 to 1929. When it is recalled that the population of Canada is estimated to have increased only 11·3 p.c. during the same period, the growth of manufacturing production is indeed remarkable. Of this advance, the part resulting from an increase in the domestic demand due to growth of population would be about 11·3 p.c. Exports of partly and fully manufactured goods increased from $591,830,000 in the fiscal year ended Mar. 31, 1924, to $686,876,000 in the fiscal year 1930, the increase in exports representing about 3·6 p.c. of the 1923 production. The remainder of the increase in production by 1929, or a margin equal to roughly 35 p.c. of the volume of manufactures of 1923, was, therefore, apparently absorbed by increases in capital equipment and by the rise in the standard of living of the population of Canada.

A similar analysis of the volume of manufactures since 1929 in relation to population and exports would show that the decline in the depression was chiefly due to reduced exports and a cessation in production of capital equipment. The purpose classification of Table **6** shows that by 1936 the volume had risen above 1929 for the main consumption groups of food and clothing, but still lagged in durable goods such as vehicles, industrial equipment, house furnishings, etc.

As may be seen from Table **6**, all groups in the component material classification reported declines in the volume of production during the depression. In comparing the low point of the depression, *viz.*, 1933, with 1929, it is found that the iron and steel group suffered the greatest contraction in production with a decrease of 61·1 p.c. This was followed by the miscellaneous industries group, with a decrease of 46·5 p.c., non-metallic mineral products 46·3 p.c., wood and paper products 30·0 p.c., non-ferrous metal products 29·1 p.c., vegetable products 25·2 p.c., chemicals and allied products 17·6 p.c., animal products 9·4 p.c., and textiles and textile products 5·7 p.c.

Since 1933 there has been a material improvement, the index of production for all industries rising from 82·0 in 1933 to 116·6 in 1936. Four groups—animal products, textiles, non-ferrous metals, and chemicals—were above the 1929 level of production. In the case of each of these groups the volume of production attained in 1936 was higher than in any previous year. The output of textiles in 1936 was about 14·8 p.c. greater than in 1928, the highest pre-depression year for this group.

---

*For a much more detailed and comprehensive treatment of this subject, see the study "The Quantity of Manufacturing Production in Canada 1923-29" by A. Cohen, B. Com., Chief, General Manufactures Branch, Dominion Bureau of Statistics.

6.—Indexes of the Volume of Manufacturing Production, According to Component Material and Purpose Classifications, 1923, 1929 and 1932-36.

(1926=100.)

Classification and Group.	1923.	1929.	1932.	1933.	1934.	1935.	1936.
Component Material Classification—							
Vegetable products	78·3	121·6	92·5	90·9	103·3	108·6	118·2
Animal products	81·4	95·4	83·2	86·4	93·9	99·1	107·1
Textiles and textile products	84·9	113·6	98·5	107·1	118·1	124·8	131·9
Wood and paper products	83·4	127·5	87·2	89·3	104·5	115·0	126·3
Iron and its products	82·2	129·7	53·4	50·5	68·1	84·5	94·3
Non-ferrous metals	72·9	138·7	100·4	98·3	120·8	138·5	156·1
Non-metallic minerals	88·9	145·0	84·4	77·8	91·9	99·1	112·7
Chemicals and allied products	84·0	120·4	93·7	99·2	112·5	123·8	132·8
Miscellaneous industries	80·1	110·0	66·1	58·9	70·8	76·6	81·7
Totals, All Industries	**81·8**	**122·9**	**81·9**	**82·0**	**96·5**	**106·5**	**116·6**
Purpose Classification—							
Food	84·7	102·8	92·7	91·9	101·0	104·1	113·6
Clothing	82·9	114·8	93·2	97·9	105·1	110·5	117·3
Drink and tobacco	76·0	140·5	101·7	96·2	110·3	125·2	137·9
Personal utilities	85·4	101·9	70·6	71·0	79·8	87·9	94·7
House furnishings	78·9	137·7	89·9	87·3	100·5	109·2	121·3
Books and stationery	93·1	131·5	127·6	122·0	138·7	154·9	159·7
Producers materials	84·9	124·7	75·0	77·9	94·7	105·6	118·7
Industrial equipment	76·3	129·5	75·6	70·2	87·5	100·5	112·5
Vehicles and vessels	71·4	131·6	52·4	53·3	70·7	83·5	87·0
Miscellaneous	85·0	125·1	99·4	113·3	137·5	148·6	164·8

7.—Indexes of the Volume of Manufacturing Production for the Groups of the Purpose Classification, 1923, 1929 and 1932-36.

(1926=100.)

Group and Class.	1923.	1929.	1932.	1933.	1934.	1935.	1936.
Food	**84·7**	**102·8**	**92·7**	**91·9**	**101·0**	**104·1**	**113·6**
Breadstuffs	90·8	110·6	97·4	94·5	103·0	103·8	109·8
Fish	74·1	77·9	57·2	59·2	70·0	66·7	74·2
Fruit and vegetable preparations	59·3	127·5	109·4	116·2	137·3	147·6	176·4
Meats	90·1	97·3	90·6	94·4	106·5	107·0	124·3
Milk products	87·4	96·7	100·8	98·5	106·5	113·3	121·4
Oils and fats	111·5	87·8	101·9	89·9	101·9	119·9	125·9
Sugar	74·3	83·0	84·1	77·4	78·7	86·1	96·9
Infusions	97·0	112·9	114·8	124·2	136·3	142·6	150·0
Miscellaneous	82·9	120·2	111·6	118·7	132·2	150·4	173·8
Clothing	**82·9**	**114·8**	**93·2**	**97·9**	**105·1**	**110·5**	**117·3**
Boots and shoes	79·8	110·0	83·0	87·4	92·5	97·2	104·0
Fur goods	48·3	114·6	89·3	95·1	97·6	101·2	113·3
Garments and personal furnishings	90·6	113·3	87·8	96·5	107·9	115·7	119·1
Gloves and mittens	93·9	133·3	97·7	121·1	145·6	145·9	167·9
Hats and caps	67·1	109·2	87·0	85·1	100·6	107·9	113·1
Knitted goods	83·9	111·4	103·2	107·5	113·4	116·4	126·2
Waterproofs	78·4	143·8	107·9	105·2	112·1	140·5	162·5
Miscellaneous	97·7	138·0	128·1	120·4	118·4	122·4	132·0
Drink and Tobacco	**76·0**	**140·5**	**101·7**	**96·2**	**110·3**	**125·2**	**137·9**
Beverages, alcoholic	69·2	148·0	94·0	84·6	101·0	119·7	135·7
Beverages, non-alcoholic	86·0	146·8	137·4	131·5	143·4	155·9	174·9
Tobacco	81·3	133·3	108·8	113·4	121·9	129·3	133·2
Personal Utilities	**85·4**	**101·9**	**70·6**	**71·0**	**79·8**	**87·9**	**94·7**
Jewellery and time-pieces	92·4	104·2	78·3	79·7	89·1	103·1	110·6
Recreational supplies	93·0	85·0	28·0	23·2	32·5	35·6	44·9
Personal utilities	78·6	111·7	104·1	109·3	116·6	127·0	131·9
House Furnishings	**78·9**	**137·7**	**89·9**	**87·3**	**100·5**	**109·2**	**121·3**
Books and Stationery	**93·1**	**131·5**	**127·6**	**122·0**	**138·7**	**154·9**	**159·7**
Producers Materials	**84·9**	**124·7**	**75·0**	**77·9**	**94·7**	**105·6**	**118·7**
Farm materials (fertilizers)	78·3	130·8	381·1	505·8	609·1	675·3	754·9
Manufacturers materials	82·9	124·4	82·9	91·0	111·2	123·7	137·8
Building materials	88·0	123·1	54·1	47·3	57·7	65·4	76·3
General materials	95·4	133·4	79·2	76·8	88·0	96·0	105·4
Industrial Equipment	**76·3**	**129·5**	**75·6**	**70·2**	**87·5**	**100·5**	**112·5**
Farming equipment	66·8	98·9	25·4	29·6	41·2	59·0	66·1
Manufacturing equipment	86·2	131·4	65·0	58·2	79·5	101·8	118·2
Trading equipment	83·3	116·4	120·2	120·6	133·6	137·3	135·0
Service equipment	96·3	107·9	103·7	103·1	113·3	157·6	128·9
Light, heat and power equipment	66·2	149·0	100·3	87·7	106·7	122·8	134·5
General equipment	84·3	130·0	68·2	66·4	85·1	93·8	109·5
Vehicles and Vessels	**71·4**	**131·6**	**52·4**	**53·3**	**70·7**	**83·5**	**87·0**
Miscellaneous	**85·0**	**125·1**	**99·4**	**113·3**	**137·5**	**148·6**	**164·8**
Totals, All Manufactures	**81·8**	**122·9**	**81·9**	**82·0**	**96·5**	**106·5**	**116·6**

In analysing the changes in the volume of production, on a purpose classification basis, some interesting facts are revealed. In comparing 1933 with 1929 it is found that the food group reported a decrease of 10·6 p.c., while that of clothing decreased 14·7 p.c. The output of vehicles and vessels, which is largely made up of the automobile and rubber-tire industries, recorded a decrease of 59·5 p.c.—this is the greatest decrease of any group. Producers materials and industrial equipment declined 37·5 p.c. and 45·8 p.c., respectively, due to the general decline in industrial activity. House furnishings dropped 36·6 p.c., personal utilities 30·3 p.c., drink and tobacco 31·5 p.c., and books and stationery 7·2 p.c. The decrease in the personal utilities group needs some explanation. The production of musical instruments, which is included in this group, has been decreasing steadily during the past few years, the output of pianos, phonographs and phonograph records becoming smaller and smaller. The main product of the musical instruments industry, namely, the radio, is now produced in the electrical apparatus industry. This industry, however, is credited to the industrial equipment group, as by far the largest part of its output consists of industrial equipment.

All groups have shared in the improvement since 1933. Food and clothing were major groups in which volume was greater in 1936 than in 1929, while the minor groups, "books and stationery" and "miscellaneous" were considerably above 1929.

The index of the physical volume of production dropped from 122·9 in 1929 to 82·0 in 1933 and has risen to 116·6 in 1936, making a net decrease of 5·1 p.c. since 1929. This decrease is significant when compared with a decrease of 26·5 p.c. in the net value of production and 15·2 p.c. in the number of wage-earners employed.

The construction of this new index of the volume of manufacturing production has superseded, for 1923 and later years, the index published in 1931 and previous years. The former index, which made no pretence to the reliability of the new one, was made by dividing the gross value of manufactures by the index number of the prices of manufactured goods. The central electric stations were included in the former index, but are excluded from the new one. However, the former index covered the period 1917 to 1923 not covered in the new one and, since this earlier period was one of wide fluctuations in money values, the following index numbers are given for the whole period since 1917, using the earlier method, but excluding central electric stations, for the years 1917 to 1922, and the new index, transposed to the 1917 base, from 1923 to 1936.

INDEXES OF THE VOLUME OF MANUFACTURING PRODUCTION, 1917-36.
(1917=100.)

1917	100·0	1922	96·0	1927	136·5	1932	105·0
1918	102·0	1923	104·8	1928	148·8	1933	105·1
1919	98·1	1924	102·9	1929	157·5	1934	123·7
1920	95·0	1925	112·7	1930	142·8	1935	136·4
1921	86·1	1926	128·1	1931	124·1	1936	149·4

Section 2.—Production of Industrial Groups and Individual Industries.

For the purposes of the Census of Manufactures, the main detailed analysis is made under a classification in which industries are grouped according to the chief component material of the goods manufactured. This is, therefore, the grouping used in Table **9**, where the statistics of individual industries are presented in detail and in the historical series already shown in Table **3**. However, there are also less detailed analyses under purpose groupings appearing in Table **10** and under origin groupings in Table **11.**

Subsection 1.—Manufactures Grouped by Chief Component Materials.

A classification based on the chief component materials in the various products of each manufacturing establishment was applied for the first time in the compilation of the returns for 1920. The number of groups was reduced from fifteen to nine to correspond with the external trade classification and the classes of industry were somewhat altered to conform with recent industrial developments. Subsequently, a number of minor changes have been made, the most important being the elimination of the central electric station industry from the compilation in 1936. For this edition revisions due to these changes have been carried back to 1917 in so far as possible.

Effects of the Depression upon the Main Groups.—In Table 8 is shown the effects of the depression and the recovery since 1933 upon the main groups of industries with regard to the numbers employed, the salaries and wages paid, and the gross value of products. Owing to the price decline in the depression, money values both of wages and of products were naturally affected more than the number of employees. Furthermore, during periods of curtailed production there is a tendency for wage-earners to be put on part time, while the number of salaried employees responds less quickly to reduction in output than that of wage-earners. Therefore, there are a number of reasons why the variation in the number of employees should be less than that of money values. The figures of Table 8 should be compared with those of Table 6 which show changes in volume of production.

As noted elsewhere in this chapter (especially under the discussion of volume of manufacturing production on pp. 387 to 389), the depression affected the production of capital or durable goods much more than that of consumption goods. Therefore, production in such groups as iron products, and wood and paper products declined more seriously than that in such groups as textiles, vegetable products, and animal products, and in 1936 the recovery had not progressed far enough for the production of durable goods to have regained the relative position it held in 1929.

8.—Percentage Variation in Employment, Salaries and Wages, and Gross Value of Products in the Main Groups of Industries Compared for Specific Years, 1929-36.

NOTE.—The highest pre-depression year was 1929, while the lowest depression year was 1933.

Group of Industries.	1933 Compared with 1929.			1936 Compared with 1929.			1936 Compared with 1933.		
	Employees.	Salaries and Wages.	Gross Value of Products.	Employees.	Salaries and Wages.	Gross Value of Products.	Employees.	Salaries and Wages.	Gross Value of Products.
Vegetable products	−17·2	−28·5	−44·8	− 4·4	−12·0	−23·8	+15·5	+23·1	+38·2
Animal products	−21·5	−25·2	−43·3	− 6·0	− 6·8	−16·7	+19·8	+24·5	+46·8
Textile products	− 7·9	−23·3	−30·7	+10·7	[1]	− 9·2	+20·1	+30·5	+31·1
Wood and paper products	−36·1	−46·8	−52·9	−19·6	−26·4	−31·4	+26·0	+38·2	+45·6
Iron and its products	−48·6	−64·5	−72·6	−24·9	−37·9	−42·7	+46·2	+75·0	+109·1
Non-ferrous metals	−36·6	−48·4	−41·9	− 7·4	−17·3	+23·8	+46·1	+60·5	+113·1
Non-metallic minerals	−42·0	−50·5	−42·8	−24·9	−32·2	−22·7	+29·5	+36·9	+ 35·4
Chemicals	− 7·8	−17·2	−33·0	+19·3	+11·4	− 8·4	+29·3	+34·6	+ 36·7
Miscellaneous products	−22·6	−37·3	−52·9	− 4·3	−17·6	−32·8	+23·5	+31·5	+ 42·5
Averages, All Industries	**−29·7**	**−43·9**	**−49·7**	**−10·8**	**−21·3**	**−22·7**	**+26·8**	**+40·3**	**+ 53·6**

[1] An increase of less than five-hundredths of one per cent.

Vegetable Products.—The industries of this group are mainly dependent upon the agricultural crops of Canada for their raw materials and, in some instances, their products enter largely into the export trade. However, there are some important industries in the group—e.g., the rubber industry—which are almost entirely dependent upon imported raw materials.

The Flour-Milling Industry.—This is the most important member of the group from the standpoint of gross value of production. Under modern conditions the industry has a capacity for flour production far in excess of domestic consumption, so that its prosperity has fluctuated widely with the condition of the export market. Exports of wheat flour declined from 10,700,000 barrels in 1928 to 4,850,000 in 1936, but in spite of the decrease Canada continues to be one of the leading exporters of wheat flour. A majority of flour-mills also grind coarse grains for the production of live stock feeds. In rural districts there are many small mills devoted entirely to the grinding or chopping of feed grains, usually on a custom basis.

FLOUR-MILLS OF CANADA, WITH THEIR EQUIPMENT AND CAPACITIES, BY PROVINCES, 1936, WITH TOTALS, 1935.

Province.	Flour and Grist Mills.	Chopping Mills.	Total Mills.	Rolls.	Stones.	Capacity of Flour-Mills.
	No.	No.	No.	pairs.	pairs.	bbl. per day.
Prince Edward Island	11	1	12	60	12	482
Nova Scotia	3	8	11	11	Nil	93
New Brunswick	6	21	27	50	“	390
Quebec	85	148	233	536	144	12,620
Ontario	124	513	637	1,981	41	50,333
Manitoba	34	7	41	555	2	11,385
Saskatchewan	49	19	68	553	15	13,635
Alberta	48	33	81	633	5	12,369
British Columbia	3	5	8	46	Nil	735
Totals, 1936	363	755	1,118	4,425	219	102,042
Totals, 1935	384	743	1,127	4,496	238	105,240

Bread and Bakery Products.—With the increase in urban population, and the changes resulting from motor transportation which make it possible for factory-made bread to be economically distributed in rural communities, the bread industry has expanded rapidly in the last decade. Table **12**, p. 408, shows that in 1936 this industry ranked eleventh in gross value of products, eighth in net value, third in number of employees, and seventh in salaries and wages paid.

Rubber Goods.—The rubber industry in 1936 ranked third in this group and twelfth among the industries of Canada in gross value of products. This industry is, of course, closely related to the use of motor vehicles, and the fact that in 1936 Canada stood fifth among the nations of the world in the number of such vehicles registered partly accounts for her ranking among the leading countries as a manufacturer of rubber goods. The industry is able to operate so efficiently in Canada upon a quantity basis that, besides supplying the domestic market, it contributes largely to the export trade. See the Condensed Preliminary Report on the Trade of Canada, 1937-38, p. 46, where it is shown that in 1937 Canada ranked third in the export of rubber tires.

Fruit and Vegetable Preparations.—This industry, which includes canned fruits, canned vegetables, pickles, vinegar, jams, etc., is another important member of the vegetable products group. The industry has grown rapidly since the War. During the period 1923-36 the volume of fruit and vegetable preparations produced increased nearly 200 p.c. (see Table **7**, p. 388). This growth is remarkable as it represents an increase in the domestic demand, both imports and exports being relatively small as compared with domestic production, although there is a small export surplus.

Tobacco, Cigars, and Cigarettes.—The tobacco manufacturing industry is another important division of this group which caters very largely to the domestic market.

Imports and exports of manufactured tobacco are small. The industry normally absorbs about three-quarters of the tobacco crop of Canada, although a proportion of imported raw leaf is used for blending.

Other important industries of this group are: biscuits and confectionery, brewing, distilling, and sugar refineries. With regard to this last industry, refineries situated on the Atlantic and Pacific coasts use imported raw cane sugars, while others in Western Ontario and Alberta manufacture beet sugar. The production of the latter is shown in the Agriculture chapter, p. 227.

Animal Products.—The industries of this group process the products of agricultural live stock, of the fisheries, and of fur-bearing animals.

Slaughtering and Meat Packing.—The products of this, the leading industry of the group, besides supplying the home market, constitute an important element in exports, especially bacon and hams. The growth of the industry from a production valued at $3,800,000 in 1870, and $7,100,000 in 1890, to that of to-day has been accompanied by a concentration of the major part of the production into a comparatively small number of large establishments, thereby facilitating greater efficiency of operation and the utilization of by-products such as fertilizers, glue, and canned meats and soups. There has been a large increase in the number of establishments since 1931, due to the inclusion of wholesale butchers operating small plants engaged in slaughtering only. The inclusion of these small establishments did not affect materially the value of production of the industry. The numbers of live stock slaughtered at Canadian inspected establishments are shown in the Internal Trade Chapter (see Index).

Butter and Cheese.—This industry has been for many years of leading importance in Canada. It originated in the mixed-farming and dairying districts of Eastern Canada, and about the beginning of the century there were large exports of butter and cheese. However, with the increase of population accompanying the expansion of grain growing on the prairies, exports of these products declined. Since the War there has been a tendency for mixed farming and dairying to spread in certain districts of the West and in some years there has been a considerable export movement of butter again. Cheese production has declined since the War, but a large proportion of the production is still exported. Further information regarding the dairy industries appears in the Agriculture chapter (see Index).

Leather Tanneries, and Boots and Shoes.—The tanning industry has long been established on a considerable scale, mainly, of course, because the large numbers of cattle raised and slaughtered provide a ready supply of hides. The industry is now so well developed that there is an export surplus of tanned leather. The boot and shoe industry almost completely supplies the home market in standard lines, the small import surplus being largely confined to expensive shoes. The tanning industry is chiefly centred in Ontario, while more than half the production of boots and shoes comes from Quebec.

Fish Curing and Packing.—This industry occupies an important place in relation to the fisheries of Canada. A considerable proportion of the annual catch is exported to foreign markets in cured and canned forms. Further information regarding the industry appears in the Fisheries chapter, especially at pp. 304 to 306.

Textile Products.—The industries of this group have developed from the household spinning and weaving of the early settlers. They now supply the bulk of the requirements of domestic consumption (see Table 5, p. 386). The import balance under this heading consists largely of either raw materials or fine goods which cannot be competitively manufactured in Canada. Two important raw materials consumed by branches of industry in this group—namely, raw cotton and raw silk—are entirely imported. The industries of this group are chiefly developed in the eastern provinces, where the factors of climate, cheap power, available labour forces, and accessibility of raw materials are favourable to large-scale growth.

In net production, *i.e.*, in value added by manufacture, which is a truer criterion than gross production of the place of the group in the industrial life of the country, the textile group was fourth in 1936 among the nine major groups shown in the summary statistics of Table **3**, p. 383, being exceeded only by the wood, vegetable, and iron and its products groups. Textiles accounted for about 13 p.c. of the net manufacturing production of Canada. As an indication of the contribution which the textile group made in 1936 to employment in the Dominion, the group stood second in the number of employees and third in salaries and wages paid, with about 19·4 p.c. of the total employees in manufacturing and 15·5 p.c. of the total salaries and wages paid. (See Table **21**, p. 422.) The manufacture of textiles may be regarded under two general divisions: (1) the spinning, weaving, and knitting trades, and (2) the finishing trades. In the past, the second division, which consists principally of the making up of piece goods into articles of clothing, has been the larger, but in recent years there has been a tendency for the first or primary division to equal or exceed the second in value of production.

Cotton Yarn and Cloth.—This is the largest industry in the textile group, and in 1936 ranked tenth among the industries of Canada (see Table **12**, p. 408), and third among the industries of Quebec (Table **14**, p. 412).

Hosiery and Knitted Goods.—This industry is important from the standpoint of employment in the Dominion. In 1936, although ranking only sixteenth in value of production, it was ninth in salaries and wages paid (Table **25**, p. 427). The volume of knitted goods produced has increased materially in recent years and in 1935 and 1936 exceeded the volume of 1929 (Table **7**, p. 388).

Silk and Artificial Silk.—This industry has shown a remarkable expansion during recent years. While the great majority of other manufactures have scarcely yet regained the level of production attained in 1929, this industry has since then increased 23 p.c. in capital investment, 133 p.c. in the number of employees, 132 p.c. in salaries and wages paid, 82 p.c. in net value and 86 p.c. in gross value of production. As most of these comparisons are in money values, the record is especially remarkable in view of the decline in price levels during the period. Much of the growth has been due to the development of artificial silk textiles.

Finishing Trades.—As already mentioned, the industries engaged in making up piece goods into clothing are a very important division of the textile group. The largest of these industries are women's factory clothing, men's factory clothing, and men's furnishing goods, while the manufacture of hats and caps and of corsets are somewhat smaller industries in the same division. The manufacture of woollen textiles is not so largely developed in Canada as that of other textile products. Nevertheless, the woollen cloth, woollen goods, woollen yarn, and carpet industries taken together constitute quite a large textile production and, in addition, the products of the hosiery and knitted goods industry include a large percentage of woollen materials. Detailed statistics of these industries are shown in Table **9**, while their relative importance compared with other industries in Canada appears in Table **12**. Imports and exports of textile products may be found in Tables **12** and **13** of the External Trade chapter of this volume.

Wood and Paper Products.—While the gross value of production by industries of this group in 1936 was second among the main groups to that of vegetable products, the wood and paper group stood highest in net values, employees, and salaries and wages paid. These industries draw their raw materials almost entirely from the forests of Canada. The primary operations in the woods provide work during part of the year for an average of 200,000 individuals, largely during the season when other forms of employment are at their minimum. This has a valuable steadying effect on general labour conditions throughout the year.

The operations of the two leading industries under this group, namely, pulp and paper mills and sawmills, are treated fully in the Forestry chapter at pp. 273 to 284, while statistics regarding capital, employees, power installed, etc., appear in Table 9, p. 398.

The printing industries—printing and publishing, printing and bookbinding, lithographing, engraving, and trade composition—are included within this group because paper is the principal material used by them. The first two especially make an important contribution to manufacturing production in Canada, as indicated by their place in the forty leading industries (Table 12). Other large industries included in the wood and paper group are: paper boxes and bags, furniture, and planing mills, sash and door factories.

Iron and Its Products.—The gross value of production by industries of this group was third among the nine main groups in 1936. However, in periods of active prosperity the relative standing of the group tends to rise and thus it stood first in 1920 and 1929 (Table 3), while in 1933 it was fifth. The value of production more than doubled from 1933 to 1936, while the volume (Table 6) nearly doubled. The demand for durable goods depends in large measure upon the rate of capital improvement, which is almost at a standstill in times of depression and rises to a high level in times of prosperity.

Primary Iron and Steel.—There are at present four companies operating blast furnaces in Canada for the production of pig iron. One of these is located in Nova Scotia and uses local coal and iron ore from the great Wabana deposit in Newfoundland which it controls. The other three are located in Ontario on the Great Lakes waterways where they have the advantage of cheap water transportation for iron ore imported from the Messabi range of Minnesota and coal from Pennsylvania. These firms also operate open-hearth steel furnaces and rolling mills to make steel ingots, blooms and billets, merchant and alloy steel bars, rails, structural shapes, plates, sheets, rail fastenings, etc. There is also a large production in Canada of ferro-alloys (ferro-silicon, ferro-manganese, etc.) which are produced in electric furnaces. These alloys usually constitute the most important item of Canadian exports of primary iron. Output of these products since 1911 is shown in Table **15** of the Mines and Minerals chapter, p. 340.

Automobiles.—This is the most important industry of the iron group and is indeed one of the largest industries in Canada (Table 12). Table 4 of Part III of the Transportation chapter shows the number of vehicles manufactured, imported, and exported in each year, while in the Internal Trade chapter, the retail sales of motor vehicles are shown (see Index).

Automobile Supplies.—As an adjunct to the manufacture and wide use of motor vehicles, a large industry has developed for the independent production of parts and supplies required for the making, repair, and upkeep of such vehicles.

Railway Rolling-Stock.—With railway transportation so important a factor in the economic life of Canada, the manufacture and repair of railway vehicles is a large and widespread industry. In addition to rolling-stock for the standard steam and electric railways, the industry produces locomotives and cars for industrial, mining, and engineering purposes. The industry stands high among the industries of Canada in the number of employees engaged and in salaries and wages paid.

Other important industries classified under the iron group are: machinery, sheet metal products, castings and forgings, wire and wire goods, hardware and tools, agricultural implements, etc. The manufacture of agricultural implements has been at a low level for some years owing to the depressed condition of agriculture, especially in the grain-growing West.

Non-Ferrous Metals.—Two industries classified under this group have shown outstanding development in the period since the War.

Non-Ferrous Metal Smelting and Refining.—This industry now ranks first in gross value of products and second in net value. An important factor in its rapid growth has been the discovery and development of a number of large deposits of base metal ores in Canada, while the availability of low-cost electric power has been another factor in its expansion. This latter factor very largely accounts for the establishment of one large plant on the Saguenay where imported aluminium ore is smelted into bars and other forms of pure metal for export. The products of the whole industry now constitute an important element of the export trade.

Electrical Apparatus and Supplies.—The total horse-power installed in central electric stations in Canada has increased from 1,900,000 in 1919 to 7,100,000 in 1936, while the production in kilowatt hours has increased in the same period from 5,500,000,000 to 25,400,000,000 (see Table 4, Water Powers chapter, p. 364). Accompanying this growth of production there has been a very widespread extension of the use of electricity for industrial, commercial, and domestic purposes. A large market has therefore developed in Canada for a wide variety of electrical equipment from the largest generators down to household appliances, and a very large industry (ninth among the industries of Canada in 1936, as shown in Table 12) has grown up to supply that market.

Non-Metallic Mineral Products.—About half the total production of this group is accounted for by the petroleum refining industry.

Petroleum Products.—This, the petroleum refining industry, has grown to its present size with the increased use of motor vehicles. In the past the crude petroleum has been largely imported and the refineries were located where such imports were economically available either by water or pipe-line transportation. Developments in the Turner Valley are providing a large supply of crude petroleum in Canada.

Coke and Gas Products.—This industry, being chiefly the production of domestic heating and illuminating gas, has not shown any marked expansion, being affected by the competition of low-cost electricity. However, most of the main centres of population are provided with gas services. Production in 1921, valued at $33,000,000 was little less than that of the present time.

Other important industries included in the non-metallic mineral group are: glass products, abrasives, cement, and clay products. The two last-mentioned industries were below normal production in 1936 owing to the low level of activity in construction and building. The manufacture of artificial abrasives is well developed in Canada because of the advantage of low-cost electric power and a considerable part of the product of the industry is exported.

Chemicals and Allied Products.—Industries of this group are widely developed in Canada. Production attained a very high level during the War. However, since those war industries disappeared there has been a very real growth for ordinary commercial and industrial purposes. Volume of production under this group was higher in 1936 than in any other year since the War (Table 6).

9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

	Province, Group or Kind of Industry.	Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	$	No.	No.	$
	PROVINCE.					
1	Prince Edward Island	233	2,394,532	195	42	188,713
2	Nova Scotia	1,158	87,888,353	1,671	414	2,812,658
3	New Brunswick	784	81,468,098	1,459	372	2,808,297
4	Quebec	7,969	1,029,546,039	25,852	6,404	52,617,663
5	Ontario	9,753	1,588,484,130	40,261	13,320	92,027,467
6	Manitoba	1,011	118,515,841	3,445	803	6,709,343
7	Saskatchewan	694	42,055,557	1,524	262	2,289,562
8	Alberta	905	70,224,578	2,169	410	3,733,361
9	British Columbia and Yukon	1,695	250,686,403	4,833	981	10,010,993
	Totals	**24,202**	**3,271,263,531**	**81,409**	**23,008**	**173,198,057**
	INDUSTRIAL GROUP.					
1	Vegetable products	5,824	524,164,493	13,865	3,500	27,678,647
2	Animal products	4,433	222,299,844	10,191	2,132	16,483,096
3	Textiles and textile products	1,879	316,273,003	8,503	3,914	21,698,875
4	Wood and paper products	8,175	874,592,781	20,688	5,084	41,067,168
5	Iron and its products	1,317	600,424,322	12,372	3,178	28,478,793
6	Non-ferrous metal products	512	266,322,074	5,494	1,773	13,561,682
7	Non-metallic mineral products	803	282,596,535	3,454	838	7,485,905
8	Chemicals and allied products	745	147,664,533	5,201	1,975	13,030,793
9	Miscellaneous industries	514	36,925,946	1,641	614	3,713,098
	1.—Vegetable Products	**5,824**	**524,164,493**	**13,865**	**3,500**	**27,678,647**
1	Aerated and mineral waters	406	13,326,302	765	166	1,388,456
2	Biscuits, confectionery, cocoa, etc	206	39,802,756	1,956	537	4,193,891
3	Bread and other bakery products	3,101	46,108,482	2,193	607	2,906,890
4	Breweries	70	55,969,772	1,006	123	2,379,205
5	Coffee, tea, and spices	92	13,347,535	527	175	1,203,771
6	Distilleries	16	37,987,604	399	104	992,231
7	Flour and feed mills	1,118	61,867,287	1,533	184	2,143,380
8	Foods, breakfast	28	5,006,372	71	43	162,787
9	Foods, stock and poultry	94	5,455,232	240	80	445,254
10	Foods, miscellaneous	116	10,374,562	454	171	1,032,758
11	Fruit and vegetable preparations	304	41,572,514	812	285	1,563,870
12	Ice cream cones	7	540,558	10	7	22,272
13	Linseed and soya bean oil	10	2,544,705	31	7	91,360
14	Macaroni, vermicelli, etc	15	2,167,098	64	22	108,306
15	Malt and malt products	12	10,861,614	71	8	171,271
16	Rice mills	6	916,890	16	2	44,054
17	Rubber goods, including footwear	50	64,600,479	1,352	445	3,115,782
18	Starch and glucose	4	6,759,783	110	44	325,771
19	Sugar refineries	10	33,199,993	345	63	1,169,529
20	Tobacco, cigars, and cigarettes	95	58,785,097	1,611	390	3,554,031
21	Tobacco processing and packing	16	6,022,580	153	6	286,156
22	Wine	48	6,947,278	146	31	377,622
	2.—Animal Products	**4,433**	**222,299,844**	**10,191**	**2,132**	**16,483,096**
1	Animal oils and fats	4	90,322	4	1	11,494
2	Belting, leather	13	849,873	46	15	94,159
3	Boot and shoe findings, leather	19	1,312,383	45	4	88,883
4	Boots and shoes, leather	219	25,318,549	1,198	429	2,644,644
5	Butter and cheese	2,573	60,201,575	4,394	766	4,748,886
6	Condensed milk	22	4,863,960	100	32	221,282
7	Dairy products, other	45	2,672,418	103	28	192,502
8	Fish curing and packing	624	18,614,592	479	79	734,678
9	Fur dressing and dyeing	14	1,312,578	66	9	160,895
10	Fur goods	331	11,510,199	588	162	1,116,942
11	Gloves and mittens, leather	49	2,533,807	155	53	303,994
12	Hair goods, animal and human	4	54,975	5	2	1,234
13	Leather tanneries	87	23,627,727	332	69	936,766
14	Miscellaneous leather goods	223	6,307,370	436	119	699,624
15	Sausage and sausage casings	64	1,222,841	76	18	168,767
16	Slaughtering and meat packing	142	61,806,675	2,164	346	4,358,346
	3.—Textiles and Textile Products	**1,879**	**316,273,003**	**8,503**	**3,914**	**21,698,875**
1	Awnings, tents, and sails	70	1,926,318	127	38	190,157
2	Bags, cotton and jute	24	5,227,587	105	36	312,866
3	Batting and wadding	5	1,298,859	16	6	65,647
4	Carpets, mats, and rugs	26	6,866,544	165	48	415,447
5	Clothing, factory, men's	188	18,570,959	1,340	401	2,548,648
6	Clothing, factory, women's	583	25,114,251	1,662	948	4,062,438

Materials, and Values of Products of Canadian Manufacturing Industries, 1936.

Employees on Wages.			Power Installed.	Cost of Fuel and Electricity.	Cost of Materials.	Value of Products.		
Male.	Female.	Wages.				Net.	Gross.	
No.	No.	$	h.p.	$	$	$	$	
529	230	364,295	3,578	55,994	2,200,028	1,055,201	3,311,223	1
11,603	2,256	10,971,898	175,455	3,918,560	36,077,900	27,788,510	67,784,970	2
10,008	1,871	9,046,754	203,062	3,150,863	29,292,851	23,781,487	56,225,201	3
115,619	47,001	129,701,791	1,613,597	31,144,632	455,027,759	377,514,998	863,687,389	4
184,307	51.104	222,845,376	1,734,311	38,196,933	822,884,081	686,470,917	1,547,551,931	5
15,075	3,184	17,780,956	130,111	2,660,847	74,374,078	45,015,577	122,050,502	6
3,719	277	3,723,816	36,116	1,107,858	35,311,152	15,185,500	51,604,510	7
8,212	965	8,595,110	71,258	1,367,845	47,684,029	25,000,136	74,052,010	8
30,905	3,077	35,843,381	494,379	6,993,614	121,362,118	87,780,346	216,136,078	9
379,977	**109,965**	**438,873,377**	**4,461,867**	**88,597,146**	**1,624,213,996**	**1,289,592,672**	**3,002,403,814**	
48,789	20,917	56,719,314	342,123	9,763,856	333,562,766	254,135,013	597,461,635	1
40,318	10,968	41,346,433	126,807	4,865,847	283,265,546	109,823,848	397,955,241	2
47,082	55,467	73,317,295	221,830	6,271,053	197,336,683	162,677,272	366,285,008	3
97,078	9,524	100,234,172	2,227,328	30,104,711	205,978,921	261,020,034	497,103,666	4
88,444	3,209	98,058,864	681,038	13,926,131	227,886,781	211,572,641	453,385,553	5
25,230	4,438	31,529,509	461,129	5,957,517	212,783,636	132,423,707	351,164,860	6
17,110	572	18,916,505	237,163	12,529,603	96,534,218	68,707,776	177,771,597	7
9,927	2,807	12,196,474	137,442	4,537,701	52,482,873	69,854,217	126,874,791	8
5,999	2,063	6,554,811	27,007	640,727	14,382,572	19,378,164	34,401,463	9
48,789	**20,917**	**56,719,314**	**342,123**	**9,763,856**	**333,562,766**	**254,135,013**	**597,461,635**	
2,275	87	2,214,570	4,016	187,932	5,146,511	11,713,038	17,047,481	1
3,875	4,833	5,907,384	22,023	739,894	22,191,155	23,120,592	46,051,641	2
14,619	2,179	14,796,682	16,492	1,975,417	32,124,708	31,458,312	65,558,437	3
3,439	36	4,138,599	23,252	711,163	15,540,509	27,796,122	44,047,794	4
785	599	1,160,642	3,220	99,531	19,140,291	7,172,270	26,412,092	5
931	534	1,311,467	9,075	415,970	4,743,377	15,036,838	20,196,185	6
3,809	159	3,399,565	118,554	1,322,193	90,614,236	22,680,670	114,617,099	7
383	205	659,603	5,010	194,826	3,642,775	6,929,032	10,766,633	8
473	15	468,226	7,200	98,370	7,015,005	2,523,337	9,636,712	9
731	461	983,399	6,088	173,270	8,316,497	7,755,754	16,245,521	10
3,844	4,317	4,502,891	18,832	666,526	27,455,449	19,215,422	47,337,397	11
33	11	29,722	53	12,734	104,113	137,797	254,644	12
181	Nil	168,380	2,084	57,024	3,279,241	765,517	4,101,782	13
156	119	160,745	1,860	48,634	1,087,225	620,572	1,756,431	14
253	3	342,621	5,621	283,807	5,234,653	2,123,494	7,641,954	15
74	1	72,953	601	5,007	1,168,113	298,904	1,472,024	16
7,115	2,969	8,838,234	65,865	1,256,769	23,598,661	37,199,378	62,054,808	17
493	18	479,848	4,425	205,009	3,027,668	2,651,016	5,883,693	18
2,064	87	2,244,169	23,075	1,050,286	27,924,998	11,430,093	40,405,377	19
2,003	3,584	3,653,706	3,102	156,025	20,111,289	20,020,045	40,287,359	20
893	670	869,347	393	50,567	10,795,356	2,078,748	12,924,671	21
355	30	316,561	1,282	52,902	1,300,936	1,408,062	2,761,900	22
40,318	**10,968**	**41,346,433**	**126,807**	**4,865,847**	**283,265,546**	**109,823,848**	**397,955,241**	
21	Nil	21,540	94	6,451	89,411	79,367	175,229	1
99	"	90,255	352	9,622	452,034	320,515	782,171	2
336	53	282,051	2,869	46,258	623,355	693,825	1,363,438	3
8,907	5,427	8,977,358	6,741	281,130	18,889,035	16,372,950	35,543,115	4
9,937	448	10,023,364	41,188	1,710,322	80,983,372	30,018,633	112,712,327	5
557	26	584,294	3,810	310,225	5,749,661	2,447,980	8,507,866	6
284	32	314,499	1,823	51,646	917,705	1,423,975	2,393,326	7
3,680	1,014	2,544,903	13,003	387,134	16,459,938	9,837,729	26,684,801	8
603	121	608,600	874	37,319	353,307	1,126,136	1,516,762	9
1,352	1,051	2,254,424	525	64,214	9,136,042	5,274,679	14,474,935	10
690	937	1,005,327	328	23,878	2,251,182	1,749,530	4,024,590	11
13	2	9,436	75	1,454	26,182	26,626	54,262	12
3,780	125	3,290,675	15,690	519,908	15,394,863	7,379,439	23,294,210	13
1,532	690	1,523,617	1,583	66,019	4,080,975	3,307,617	7,454,611	14
278	25	253,026	503	36,919	1,228,398	736,641	2,001,958	15
8,249	1,017	9,563,064	37,349	1,313,348	126,630,086	29,028,206	156,971,640	16
47,082	**55,467**	**73,317,295**	**221,830**	**6,271,053**	**197,336,683**	**162,677,272**	**366,285,008**	
214	173	292,810	299	14,844	999,427	787,519	1,801,790	1
298	484	599,746	1,217	41,891	7,238,846	1,776,539	9,057,276	2
107	18	116,885	766	17,210	599,899	345,678	962,787	3
655	353	805,184	2,140	115,730	1,782,796	2,234,799	4,133,325	4
4,499	4,338	7,707,097	1,747	150,951	22,728,166	17,647,628	40,526,745	5
4,587	11,727	11,193,287	3,044	224,692	32,706,792	23,187,289	56,118,773	6

9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

	Province, Group or Kind of Industry.	Establish-ments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	$	No.	No.	$
	3.—Textiles and Textile Products—concluded.					
7	Clothing contractors, men's and women's..	114	764,092	215	34	301,613
8	Cordage, rope, and twine	11	9,949,490	78	25	248,385
9	Corsets	23	3,318,953	162	206	575,756
10	Cotton and wool waste	16	825,562	35	13	90,207
11	Cotton textiles, *n.e.s*	45	2,991,132	103	51	244,730
12	Cotton thread	5	2,930,430	142	45	291,060
13	Cotton yarn and cloth	35	71,564,646	422	142	1,390,549
14	Dyeing and finishing of textiles	25	5,261,555	116	32	325,400
15	Flax, dressed	5	116,288	2	1	2,127
16	Furnishing goods, men's	176	16,626,096	750	354	1,892,861
17	Gloves and mittens, fabric	9	572,208	17	6	38,172
18	Hats and caps	170	6,892,337	493	229	1,131,604
19	Hosiery and knitted goods	168	51,398,678	955	630	2,914,978
20	Miscellaneous textiles, *n.e.s*	12	11,342,197	287	60	804,518
21	Oiled and waterproof clothing	12	821,891	24	14	68,366
22	Silk and artificial silk	35	34,947,643	668	353	2,011,144
23	Woollen cloth	60	20,434,013	374	131	1,020,791
24	Woollen goods, *n.e.s*	26	7,605,021	99	29	346,849
25	Woollen yarn	34	8,627,849	139	77	372,436
26	All other industries	2	278,404	7	5	32,126
	4.—Wood and Paper Products	**8,175**	**874,592,781**	**20,688**	**5,084**	**41,067,168**
1	Beekeepers' and poultrymen's supplies	8	200,734	16	1	19,463
2	Blue printing	21	231,834	27	6	46,004
3	Boat building	128	2,006,701	172	15	169,689
4	Boxes and bags, paper	141	20,919,171	754	267	2,005,832
5	Boxes, wooden	130	6,981,132	288	41	517,025
6	Carriages, wagons, and sleighs	172	1,501,600	196	7	134,851
7	Charcoal	68	166,276	71	Nil	12,521
8	Coffins and caskets	49	4,113,831	131	26	261,631
9	Cooperage	77	1,866,435	96	7	130,741
10	Engraving, stereotyping, and electrotyping.	95	10,290,501	508	147	1,350,330
11	Excelsior	12	329,281	23	6	19,143
12	Flooring, hardwood	20	3,146,360	94	18	202,190
13	Furniture	425	26,577,141	1,125	253	1,962,364
14	Lasts, trees, and shoe findings	13	1,282,337	40	15	122,015
15	Lithographing	42	11,148,822	385	172	1,279,531
16	Miscellaneous paper products	116	15,023,866	487	240	1,333,021
17	Miscellaneous wooden products	106	4,813,185	187	47	338,703
18	Planing mills, sash and door factories	668	30,150,645	1,197	193	1,687,679
19	Printing and bookbinding	1,224	41,738,465	2,691	738	5,437,417
20	Printing and publishing	789	53,273,296	6,074	2,027	11.828,058
21	Pulp and paper	93	539,350,001	2,994	494	8,151,012
22	Refrigerators, other than electric	10	522,221	31	8	57,632
23	Roofing paper, wall-board, etc	14	5,624,781	276	66	541,868
24	Sawmills	3,638	78,294,341	2,510	207	2,598,318
25	Trade composition	34	1,033,199	61	19	154,243
26	Woodenware	21	1,247,482	43	10	75,792
27	Wood turning	40	1,812,783	83	13	121,351
28	All other industries	21	10,946,360	128	41	508,744
	5.—Iron and Its Products	**1,317**	**600,424,322**	**12,372**	**3,178**	**28,478,793**
1	Agricultural implements	36	56,121,427	692	201	1,445,633
2	Aircraft	7	1,544.869	70	8	148,884
3	Automobiles	16	46,497,259	1,508	474	4,080,484
4	Automobile supplies	85	24,730,610	598	251	1,517,062
5	Bicycles	4	2,042,763	28	9	51,994
6	Boilers, tanks, and engines	56	14,848,789	460	103	968,888
7	Bridge and structural steel work	18	19,672,350	657	80	1,469,590
8	Castings and forgings	238	46,429,034	1,054	297	2,452,180
9	Hardware and tools	142	26,486,230	578	252	1,539,070
10	Heating and cooking apparatus	62	15,802,641	521	173	1,171,047
11	Iron and steel products, *n.e.s*	95	5,229,026	291	53	524,182
12	Machinery	218	61,206,866	1,919	540	4,130,452
13	Primary iron and steel	55	92,103,774	782	175	2,180,091
14	Railway rolling-stock	37	83,258,169	1,282	70	2,705,829
15	Sheet metal products	138	50,323,623	1,191	298	2,361,387
16	Shipbuilding and repairs	37	28,397,626	299	34	647,483
17	Wire and wire goods	73	25,729,266	442	160	1,084,537

Materials, and Values of Products of Canadian Manufacturing Industries, 1936—con.

Employees on Wages.			Power Installed.	Cost of Fuel and Electricity.	Cost of Materials.	Value of Products.		
Male.	Female.	Wages.				Net.	Gross.	
No.	No.	$	h.p.	$	$	$	$	
856	1,302	1,306,865	404	29,087	134,150	1,812,348	1,975,585	7
642	291	878,787	7,740	121,243	3,408,977	3,012,978	6,543,198	8
136	1,051	713,259	604	20,000	1,956,071	2,421,070	4,397,141	9
152	88	165,076	1,561	30,252	1,092,236	553,284	1,675,772	10
362	589	616,127	1,193	36,372	2,075,735	1,615,950	3,728,057	11
188	399	448,167	1,987	73,378	1,502,341	1,835,489	3,411,208	12
11,265	6,081	12,827,682	110,963	1,955,949	37,042,911	26,636,505	65,635,365	13
721	156	648,397	4,155	198,692	1,422,656	1,947,014	3,568,362	14
76	Nil	33,753	304	2,305	99,016	74,429	175,750	15
1,251	7,055	4,471,119	2,298	145,980	14,743,645	9,735,990	24,625,615	16
46	215	135,025	347	7,767	352,028	277,359	637,154	17
1,868	1,875	2,883,888	1,856	136,600	6,148,286	6,088,924	12,373,810	18
6,555	11,289	12,205,299	19,601	770,212	24,360,941	24,337,987	49,469,140	19
914	198	990,296	8,452	220,988	4,064,552	4,170,975	8,456,515	20
125	178	223,345	178	11,139	780,926	483,461	1,275,526	21
5,687	3,481	6,866,229	20,729	976,941	10,732,371	15,221,509	26,930,821	22
3,587	2,360	4,372,159	14,230	614,868	11,666,780	9,328,653	21,610,301	23
908	283	986,879	9,211	126,358	3,524,401	2,895,251	6,546,010	24
1,330	1,433	1,763,722	6,656	222,891	5,924,443	3,953,295	10,100,629	25
53	50	66,212	148	4,713	248,291	295,349	548,353	26
97,078	**9,524**	**100,234,172**	**2,227,328**	**30,104,711**	**205,978,921**	**261,020,034**	**497,103,666**	
32	Nil	19,339	263	3,242	51,270	92,583	147,095	1
62	4	41,502	88	4,852	65,701	158,831	229,384	2
443	4	293,783	1,835	20,309	399,226	740,204	1,159,739	3
2,666	2,215	3,756,166	7,730	254,888	14,310,960	11,022,583	25,588,431	4
2,366	227	1,627,216	14,375	111,447	2,696,448	3,162,945	5,970,840	5
259	2	206,319	1,818	30,724	300,182	484,387	815,293	6
22	Nil	12,428	71	548	28,810	28,711	58,069	7
610	112	562,611	1,855	44,910	900,938	1,426,843	2,372,691	8
445	1	345,406	2,076	24,438	1,070,544	762,240	1,857,222	9
1,450	369	2,524,737	2,995	118,338	1,158,676	5,520,162	6,797,176	10
84	13	54,456	810	8,519	90,486	128,991	227,996	11
634	5	480,257	5,723	45,615	1,691,697	1,067,805	2,805,117	12
7,980	319	6,149,513	20,699	465,474	9,251,878	12,460,577	22,177,929	13
406	168	345,690	1,158	21,458	308,840	821,770	1,152,068	14
1,439	551	2,256,681	3,185	94,448	3,752,630	5,670,322	9,517,400	15
1,267	704	1,812,596	5,711	210,607	7,658,695	7,069,099	14,938,401	16
970	101	765,731	5,062	82,285	1,647,111	1,803,039	3,532,435	17
6,223	31	4,549,549	48,105	445,184	11,204,290	9,988,805	21,638,279	18
6,873	2,375	9,072,069	13,155	451,654	12,404,562	22,243,119	35,099,335	19
8,065	1,211	12,207,661	25,561	748,556	11,967,553	45,559,802	58,275,911	20
25,873	693	31,912,840	1,742,639	25,790,954	72,202,983	87,150,666	185,144,603	21
117	2	87,856	727	6,971	196,154	243,038	446,163	22
445	3	431,859	3,406	154,379	2,461,683	2,292,578	4,908,640	23
25,884	185	18,758,720	305,155	761,768	43,598,856	35,982,667	80,343,291	24
188	3	242,892	116	14,892	42,094	598,642	655,628	25
590	71	360,541	1,864	14,349	399,185	581,931	995,465	26
724	29	424,441	3,039	32,347	677,877	1,011,930	1,722,154	27
961	126	931,303	8,107	141,555	5,439,592	2,945,764	8,526,911	28
88,444	**3,209**	**98,058,864**	**681,038**	**13,926,131**	**227,886,781**	**211,572,641**	**453,385,553**	
4,559	56	4,595,987	24,062	530,300	7,209,399	8,217,761	15,957,460	1
325	13	373,085	233	20,588	571,117	756,189	1,347,894	2
10,648	303	14,083,558	38,043	697,627	71,201,646	33,450,762	105,350,035	3
5,385	608	6,259,664	38,453	721,582	18,453,840	14,203,086	33,378,508	4
322	27	344,419	1,226	33,874	746,515	721,477	1,501,866	5
1,955	1	2,097,354	17,801	244,687	3,567,813	4,493,360	8,305,860	6
1,830	Nil	2,217,124	28,107	206,549	5,355,196	6,352,173	11,913,918	7
8,920	120	8,773,758	52,425	1,302,664	11,524,940	18,184,280	31,011,884	8
4,125	718	4,363,083	14,594	477,580	5,779,432	11,534,043	17,791,055	9
3,724	37	3,466,127	8,893	331,434	4,339,283	8,361,837	13,032,554	10
1,001	31	925,595	5,013	92,039	1,777,496	2,266,564	4,136,099	11
7,613	205	8,174,970	44,209	680,763	15,761,565	25,005,145	41,447,473	12
10,142	39	11,650,286	212,402	5,440,129	21,424,052	19,772,711	46,636,892	13
17,255	26	19,455,448	117,328	1,781,825	30,486,569	24,701,059	56,969,453	14
5,228	765	5,580,803	20,862	580,505	22,617,288	16,796,358	39,994,151	15
2,463	5	2,556,895	41,546	235,863	1,530,644	4,474,547	6,241,054	16
2,949	255	3,140,708	15,841	548,122	5,539,986	12,281,289	18,369,397	17

9.—Statistics of the Numbers, Capital, Employees, Salaries and Wages, Power, Fuel,

	Province, Group or Kind of Industry.	Establishments.	Capital Employed.	Salaried Employees.		
				Male.	Female.	Salaries.
		No.	$	No.	No.	$
	6.—Non-Ferrous Metal Products	**512**	**266,322,074**	**5,494**	**1,773**	**13,561,682**
1	Aluminium products	19	3,884,241	150	42	347,744
2	Brass and copper products	126	22,890,531	789	183	1,669,668
3	Electrical apparatus and supplies	186	79,794,524	3,205	1,171	7,803,954
4	Jewellery and silverware	113	8,834,230	385	180	1,023,041
5	Miscellaneous non-ferrous metal products	18	1,177,641	80	31	184,232
6	Non-ferrous metal smelting and refining	15	143,858,717	752	111	2,176,110
7	White metal alloys	35	5,882,190	133	55	356,933
	7.—Non-Metallic Mineral Products	**803**	**282,596,535**	**3,454**	**838**	**7,485,905**
1	Abrasive products	15	6,241,502	188	59	503,954
2	Asbestos products	13	1,955,676	50	15	125,220
3	Cement	9	53,343,991	79	5	173,001
4	Cement products	97	3,053,745	124	12	173,859
5	Clay products, from domestic clay	140	19,863,431	202	27	390,737
6	Clay products, from imported clay	20	4,216,334	103	38	244,608
7	Coke and gas products	42	93,088,722	958	315	2,023,881
8	Glass products	68	14,687,098	318	99	701,103
9	Lime	57	6,106,901	64	9	90,288
10	Miscellaneous non-metallic mineral products	38	7,934,204	121	28	277,587
11	Petroleum products	63	61,883,926	823	146	2,038,360
12	Salt	9	3,856,187	82	40	225,170
13	Sand-lime brick	5	598,510	14	1	18,621
14	Stone, monumental and ornamental	227	5,766,308	328	44	499,516
	8.—Chemicals and Allied Products	**745**	**147,664,533**	**5,201**	**1,975**	**13,030,793**
1	Acids, alkalies, and salts	20	32,596,308	603	112	1,297,038
2	Adhesives	19	2,266,199	69	18	148,318
3	Coal tar distillation	10	4,507,861	30	6	89,272
4	Explosives, ammunition, and fireworks	8	7,880,237	334	96	907,644
5	Fertilizers	20	14,800,141	205	58	432,487
6	Gases, compressed	28	4,565,549	226	84	536,321
7	Inks, printing and writing	33	2,965,168	169	49	502,405
8	Medicinal and pharmaceutical preparations	169	20,760,912	1,074	562	2,990,124
9	Miscellaneous chemical products	117	12,557,668	455	220	1,023.000
10	Paints, pigments, and varnishes	78	23,274,558	1,035	308	2,644,071
11	Polishes and dressings	48	2,236,299	158	57	331,766
12	Soaps and washing compounds	102	11,564,606	591	154	1,357,254
13	Toilet preparations	87	5,624,306	239	251	749.152
14	Wood distillation	6	2,064,721	13	Nil	21,941
	9.—Miscellaneous Industries	**514**	**36,925,946**	**1,641**	**614**	**3,713,098**
1	Artificial flowers and feathers	17	299,369	29	20	70,105
2	Automobile accessories, fabric	12	464,595	20	12	54,119
3	Brooms, brushes, and mops	79	4,142,485	208	81	421,564
4	Buttons	18	1,364,317	76	21	175,522
5	Candles	12	794,196	39	15	76,342
6	Fountain pens and pencils	9	1,919,858	71	33	184,346
7	Ice, artificial	46	4,287,690	112	20	202,829
8	Jewel cases and silverware cabinets	4	218,087	11	15	30,506
9	Mattresses and springs	61	6,326,821	229	78	576,073
10	Motion pictures	6	838,911	112	38	248,890
11	Musical instruments	19	2,203,805	52	12	83,217
12	Novelties, advertising and other	10	148,347	13	3	26,821
13	Pipes, tobacco	4	37,781	6	Nil	4,338
14	Regalia and society emblems	10	137,533	12	6	20,291
15	Scientific and professional equipment	30	6,249,514	187	100	549,814
16	Signs, electric	39	2,768,676	141	26	275,823
17	Sporting goods	36	1,589,567	87	42	151,045
18	Stamps and stencils, rubber and metal	35	767,317	74	17	132,125
19	Statuary and art goods	37	840,671	78	39	140,800
20	Store display accessories	3	121,253	7	3	11.901
21	Toys and toy equipment	11	229,478	22	8	68,543
22	Typewriter supplies	8	858,245	40	21	172,068
23	Umbrellas	7	184,815	13	3	28,761
24	All other industries	1	132,615	2	1	7,255
	Grand Totals, All Industries	**24,202**	**3,271,263,531**	**81,409**	**23,008**	**173,198,057**

Materials, and Values of Products of Canadian Manufacturing Industries, 1936—conc.

Employees on Wages.			Power Installed.	Cost of Fuel and Electricity.	Cost of Materials.	Value of Products.		
Male.	Female.	Wages.				Net.	Gross.	
No.	No.	$	h.p.	$	$	$	$	
25,230	**4,438**	**31,529,509**	**461,129**	**5,957,517**	**212,783,636**	**132,423,707**	**351,164,860**	
812	97	847,255	6,444	119,320	3,799,688	1,519,273	5,438,281	1
3,369	255	3,623,789	25,660	567,108	14,182,328	10,198,031	24,947,467	2
9,381	3,280	11,697,928	72,111	1,187,942	30,484,468	40,616,138	72,288,548	3
1,815	579	2,331,128	3,408	112,126	5,022,990	5,549,432	10,684,548	4
171	51	198,670	394	14,671	333,438	815,446	1,163,555	5
9.152	Nil	12,169,940	349,038	3,856,490	154,604,285	71,276,645	229,737,420	6
530	176	660,799	4,074	99,860	4,356,439	2,448,742	6,905,041	7
17,110	**572**	**18,916,505**	**237,163**	**12,529,603**	**96,534,218**	**68,707,776**	**177,771,597**	
902	Nil	1,024,240	7,508	967,236	3,164,252	6,500,045	10,631,533	1
284	23	251,354	2,928	79,290	622,530	592,089	1,293,909	2
968	Nil	1,023,663	71,399	1,576,142	592,929	4,739,121	6,908,192	3
461	5	395,350	2,875	50,036	763,021	900,290	1,713,347	4
1,546	Nil	1,107,411	24,351	695,001	71,353	2,704,673	3,471,027	5
742	196	756,439	2,188	214,762	708,576	1,983,094	2,906,432	6
2,838	5	3,690,602	37,720	2,781,045	16,585,571	20,505,282	39,871,898	7
2,637	269	2,821,054	13,735	851,774	4,208,706	6,034,282	11,094,762	8
726	Nil	550,034	7,086	743,663	96,316	2,495,991	3,335,970	9
690	23	698,597	9,956	311,529	2,006,984	3,150,928	5,469,441	10
4,041	9	5,271,595	42,107	3,932,634	66,555,885	15,313,844	85,802,363	11
347	37	415,474	3,476	181,502	31,195	1,560,447	1,773,144	12
60	Nil	52,400	896	17,838	55,998	115,832	189,668	13
868	5	858,292	10,938	127,151	1,070,902	2,111,858	3,309,911	14
9,927	**2,807**	**12,196,474**	**137,442**	**4,537,701**	**52,482,873**	**69,854,217**	**126,874,791**	
2,242	9	2,691,272	73,288	2,316,389	4,680,299	11,962,824	18,959,512	1
319	14	308,852	1,980	123,865	813,291	862,044	1,799,200	2
179	1	198,547	371	134,060	1,516,122	1,292,073	2,942,255	3
989	227	1,138,349	6,081	193,481	3,639,643	5,521,227	9,354,351	4
666	1	763,799	21,849	443,627	4,996,084	1,636,120	7,075,831	5
258	Nil	287,393	5,726	141,395	490,041	2,728,784	3,360,220	6
285	30	353,317	1,886	37,863	1,225,072	1,819,107	3,082,042	7
1,010	1,211	1,807,334	4,110	169,633	7,384,370	14,697,547	22,251,550	8
833	370	943,643	7,047	185,943	3,866.234	5,149,858	9,202,035	9
1,619	162	1,784,316	7,452	288,915	10,817,694	11,544,616	22,651,225	10
133	84	169,376	245	18,439	1,146,356	1,316,249	2,481,044	11
1,023	225	1,183,305	6,364	362,256	9,121,222	6,830,024	16,313,502	12
208	473	450,761	595	28,398	2,379,755	4,136,224	6,544,377	13
163	Nil	116,210	448	93,437	406,690	357,520	857,647	14
5,999	**2,063**	**6,554,811**	**27,007**	**640,727**	**14,382,572**	**19,378,164**	**34,401,463**	
58	212	113,318	40	2,836	153,167	271,251	427,254	1
101	42	130,104	207	6,280	368,414	327,369	702,063	2
894	187	768,292	1,779	41,720	1,697,968	2,032,799	3,772,487	3
456	247	455,054	822	28,203	522,570	916,641	1,467,414	4
52	27	60,670	50	8,451	247,699	269,184	525,334	5
214	204	323,922	533	17,403	894,927	1,125,491	2,037,821	6
427	12	385,708	10,617	181,927	73,208	1,316,228	1,571,363	7
58	64	83,849	71	4,058	120,049	179,049	303,156	8
1,347	221	1,375,966	4,395	94,571	4,035,123	3,274,438	7,404,132	9
57	4	85,903	61	9,205	655,472	612,536	1,277,213	10
356	14	296,012	1,196	39,304	253,862	457,750	750,916	11
22	49	44,572	26	1,923	95,159	126,924	224,006	12
28	1	17,485	22	1,041	18,262	28,043	47,346	13
13	18	21,046	29	796	28,976	65,085	94,857	14
474	259	770,748	3,833	81,274	2,745,675	3,694,293	6,521,242	15
390	11	452,927	168	41,530	424,462	1,481,705	1,947,697	16
409	133	392,729	1,603	33,860	716,613	1,012,375	1,762,848	17
160	4	169,229	189	9,307	94,660	442,137	546,104	18
199	156	259,235	724	12,112	475,552	628,304	1,115,968	19
30	3	26,903	134	3,326	15,662	48,580	67,568	20
148	118	161,555	144	10,173	222,513	440,615	673,301	21
74	25	103,657	298	8,393	331,844	441,625	781,862	22
23	43	42,277	20	858	151,237	113,224	265,319	23
9	9	13,650	46	2,176	39,498	72,518	114,192	24
379,977	**109,965**	**438,873,377**	**4,461,867**	**88,597,146**	**1,624,213,996**	**1,289,592,672**	**3,002,403,814**	

Subsection 2.—Manufactures Classified by the Purpose of the Products.

In addition to the classification according to the chief component material of the products used for the industrial census in detailed presentation, a separate and distinct classification, based on the chief purpose of the products, was applied for the first time to the census returns of 1922 and is presented in Table **10** for representative years, 1922-36, in summary form, and for 1936 in more detail.

Significant changes have occurred since 1922 in the importance of the various groups shown in the purpose classification. Indicative of the increasing industrialization of the Dominion is the increase in the "industrial equipment" group from 14·2 p.c. of the total value of production in 1922 to 14·8 p.c. of the total in 1936, and the increase in "producers materials" from 27·9 p.c. to 32·0 p.c. during the same period. Another significant change is the decline in the "food" group which dropped from a production of 28·2 p.c. to 23·5 p.c. of the total. Whereas in 1922, food products comprised the leading group, in 1936 the production of producers materials ranked first in importance. It should also be noted, however, that the cost of materials in this group is abnormally high. The following other groups have improved their positions since 1922: vehicles and vessels advanced from an output of 6·7 p.c. to 7·8 p.c. of the total value of production; drink and tobacco from 4·2 p.c. to 4·6 p.c., while books and stationery held the same proportion at 4·2 p.c.

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922-36, and in Detail for 1936.

Note.—Figures have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Year and Purpose Heading.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
1922.	No.	$	No.	$	$	$
Totals	**21,016**	**2,667,493,290**	**456,256**	**489,397,230**	**1,282,041,450**[1]	**2,385,230,538**[1]
Food	8,256	343,867,673	66,815	67,738,707	490,731,438	673,794,031
Drink and tobacco	496	104,047,461	13,402	13,777,986	33,027,203	99,529,819
Clothing	659	166,336,319	63,441	59,056,687	117,015,780	221,903,467
Personal utilities	936	56,060,262	16,904	17,080,049	21,879,031	57,258,476
House furnishings	600	75,168,053	18,032	19,861,883	24,956,960	62,961,050
Books and stationery	1,557	82,240,691	28,103	36,920,804	27,190,071	99,118,969
Vehicles and vessels	1,154	191,257,804	30,067	37,237,412	87,840,814	160,624,079
Producers materials	5,588	1,086,692,015	143,354	147,581,011	316,400,400	666,241,271
Industrial equipment	1,740	556,862,578	75,269	89,081,303	160,035,399	338,882,958
Miscellaneous	30	4,960,434	869	1,061,388	2,964,354	4,916,418
1924.						
Totals	**20,709**	**2,895,317,508**	**487,610**	**534,467,675**	**1,436,190,791**[1]	**2,584,306,764**[1]
Food	8,036	364,420,646	74,721	73,119,482	515,708,299	702,713,901
Drink and tobacco	518	124,000,298	14,702	15,748,590	39,159,283	111,877,777
Clothing	1,438	182,111,110	73,664	67,911,133	127,911,158	245,366,956
Personal utilities	341	48,367,616	9,547	11,057,386	20,304,177	41,815,384
House furnishings	587	64,787,015	15,820	17,142,226	22,448,984	54,944,837
Books and stationery	1,690	100,017,954	29,486	40,212,100	32,360,935	107,272,029
Vehicles and vessels	980	205,551,891	34,149	44,977,607	117,515,075	195,403,284
Producers materials	5,716	1,251,962,266	163,523	176,646,967	384,533,201	767,759,256
Industrial equipment	1,253	521,063,329	67,578	82,937,356	160,470,513	330,066,562
Miscellaneous	150	33,035,383	4,420	4,714,828	15,779,166	27,086,778
1926.						
Totals	**21,301**	**3,208,071,197**	**559,161**	**625,682,242**	**1,726,520,016**[1]	**3,114,693,230**[1]
Food	8,259	394,159,943	87,343	78,143,619	581,403,701	783,223,094
Drink and tobacco	574	137,139,189	15,341	16,817,622	45,115,122	130,895,267
Clothing	1,528	193,870,758	82,243	77,135,327	156,831,454	288,909,404
Personal utilities	384	50,497,988	10,633	12,470,247	24,236,592	49,724,101
House furnishings	543	60,277,954	15,684	16,858,549	22,673,689	55,353,652
Books and stationery	1,716	108,582,186	31,500	43,781,918	34,575,475	116,119,226
Vehicles and vessels	917	271,239,055	50,731	70,315,573	178,558,815	298,064,166
Producers materials	5,807	1,404,509,475	182,599	206,672,939	453,319,993	935,766,746
Industrial equipment	1,400	556,955,826	78,550	98,219,492	213,697,326	427,447,094
Miscellaneous	173	30,838,823	4,537	5,266,956	16,107,849	29,190,480

---

[1] For the years 1922, 1924, and 1926 the figures for "cost of materials" and "gross value of products" include the value placed on intermediate products used in further processes in the chemical group of industries. For this reason these figures differ slightly from those contained in the other tables of this chapter.

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups for Representative Years 1922-36, and in Detail for 1936—continued.

Year and Purpose Heading.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
1929.						
Totals	**22,216**	**4,004,892,009**	**666,531**	**777,291,217**	**2,029,670,813**	**3,883,446,116**
Food	8,351	463,984,558	94,707	87,960,036	597,396,238	837,986,384
Drink and tobacco	599	201,365,785	18,976	21,670,376	65,440,053	208,968,998
Clothing	1,680	223,376,104	93,935	88,914,849	172,726,557	336,452,685
Personal utilities	380	56,155,234	11,148	13,595,331	29,389,246	61,191,750
House furnishings	600	76,185,921	20,857	23,248,775	34,293,465	77,811,331
Books and stationery	1,917	144,222,275	38,141	56,003,183	45,384,362	155,947,960
Vehicles and vessels	781	310,942,038	61,835	91,239,185	243,258,350	407,947,648
Producers materials	6,227	1,776,758,115	223,071	258,255,079	524,193,104	1,154,908,260
Industrial equipment	1,576	719,112,914	99,922	131,820,142	304,581,449	614,827,756
Miscellaneous	105	32,789,065	3,939	4,584,261	13,007,989	27,403,344
1933.						
Totals	**23,780**	**3,279,259,838**	**468,658**	**436,247,824**	**967,788,928**	**1,954,075,785**
Food	8,759	408,995,499	75,434	68,652,798	313,760,942	492,729,174
Drink and tobacco	670	185,612,678	18,289	17,626,141	40,454,300	98,409,638
Clothing	1,922	143,382,092	75,363	56,001,234	103,209,050	194,627,734
Personal utilities	601	39,681,900	8,938	8,616,372	15,323,848	35,589,961
House furnishings	654	66,047,002	15,587	12,887,200	16,022,584	38,684,649
Books and stationery	2,170	132,507,101	34,300	42,830,661	28,818,380	103,477,707
Vehicles and vessels	479	232,153,543	37,618	35,725,625	56,917,292	120,992,781
Producers materials	6,564	1,459,569,284	139,734	126,208,238	252,383,314	573,991,467
Industrial equipment	1,819	588,147,285	60,061	64,155,426	133,382,392	277,075,032
Miscellaneous	142	23,163,454	3,334	3,544,129	7,516,826	18,497,642
1935.						
Totals	**24,034**	**3,216,403,127**	**556,664**	**559,467,777**	**1,419.146,217**	**2,653,911,209**
Food	8,561	405,894,748	83,930	78,173,759	415,364,620	614,425,247
Drink and tobacco	677	183,501,357	19,165	19,785,411	49,941,998	121,157,062
Clothing	2,028	154,799,641	85,141	67,334,391	127,396,562	233,209,222
Personal utilities	612	39,588,755	10,284	10,333,919	21.585,937	43,453,234
House furnishings	679	66,402,670	18,018	15,911,383	24,494,871	52,944,629
Books and stationery	2,262	128,707,801	36,626	46,896,177	34,354,450	117,736,267
Vehicles and vessels	464	226,007,916	45,717	53,362,973	120,325,337	215,103,397
Producers materials	6,737	1,410,095,540	177,160	175,890,774	427,693,908	845,108,272
Industrial equipment	1,856	577,491,236	76,377	86,974,026	187,338,713	387,721,840
Miscellaneous	158	23,913,463	4,246	4,804,964	10,649,821	23,052,039
1936.						
Totals	**24,202**	**3,271,263,531**	**594,359**	**612,071,434**	**1,624,213,996**	**3,002,403,814**
Food	8,596	431,309,246	89,893	85,083,543	481,136,652	705,259,946
Drink and tobacco	651	179,038,633	19,742	21,481,951	57,637,978	137,265,390
Clothing	2,073	165,053,967	89,460	71,629,227	134,693,738	247,386,145
Personal utilities	625	38,851,436	11,137	11,227,804	23,011,381	46,932,602
House furnishings	768	84,064,261	23,928	22,580,127	32,795,275	72,887,652
Books and stationery	2,321	132,739,983	38,143	49,586,742	37,049,911	125,513,235
Vehicles and vessels	451	229,849,466	48,148	57,206,737	128,834,560	235,440,142
Producers materials	6,637	1,400,194,926	186,191	191,294,293	497,944,281	961,155,247
Industrial equipment	1,920	583,841,518	83,299	96,950,642	219,247,904	445,102,028
Miscellaneous	160	26,320,095	4,418	5,030,368	11,862,316	25,461,427
1936—DETAIL.						
Food	**8,596**	**431,309,246**	**89,893**	**85,083,543**	**481,136,652**	**705,259,946**
Breadstuffs	4,493	167,271,057	38,036	35,122,126	156,166,978	248,118,863
Fish	624	18,614,592	5,252	3,279,581	16,459,938	26,684,801
Fruits and vegetables	304	41,572,514	9,258	6,066,761	27,455,449	47,337,397
Meats	206	63,029,516	12,173	14,343,203	127,858,484	158,973,598
Milk products	2,640	67,737,953	16,707	16,084,827	87,650,738	123,613,519
Oils and fats	4	90,322	26	33,034	89,411	175,229
Sugar industries	10	33,199,993	2,559	3,413,698	27,924,998	40,405,377
Infusions	92	13,347,535	2,086	2,364,413	19,140,291	26,412,092
Miscellaneous	223	26,445,764	3,796	4,375,900	18,390,365	33,539,070
Drink and Tobacco	**651**	**179,038,633**	**19,742**	**21,481,951**	**57,637,978**	**137,265,390**
Beverages, alcoholic	86	93,957,376	6,572	8,821,502	20,283,886	64,243,979
Beverages, non-alcoholic	454	20,273,580	3,855	4,297,209	6,447,447	19,809,381
Tobacco	111	64,807,677	9,315	8,363,240	30,906,645	53,212,030

10.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Purpose of the Principal Product, by Main Groups, for Representative Years 1922-36, and in Detail for 1936—concluded.

Year and Purpose Heading.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
1936—Detail—concluded.						
Clothing	**2,073**	**165,053,967**	**89,460**	**71,629,227**	**134,693,738**	**247,386,145**
Boots and shoes	219	25,318,549	15,961	11,622,002	18,889,035	35,543,115
Fur goods	345	12,822,777	3,952	4,140,861	9,489,349	15,991,697
Garments, etc	1,084	64,394,351	42,874	34,772,943	72,268,824	127,643,859
Gloves and mittens	58	3,106,015	2,119	1,482,518	2,603,210	4,661,744
Hats and caps	187	7,191,706	4,784	4,198,915	6,301,453	12,801,064
Knitted goods	168	51,398,678	19,429	15,120,277	24,360,941	49,469,140
Waterproofs	12	821,891	341	291,711	780,926	1,275,526
Personal Utilities	**625**	**38,851,436**	**11,137**	**11,227,804**	**23,011,381**	**46,932,602**
Jewellery and timepieces	117	9,052,317	3,107	3,468,524	5,143,039	10,987,704
Recreational supplies	66	4,022,850	1,401	1,153,101	1,192,988	3,187,065
Personal utilities	442	25,776,269	6,629	6,606,179	16,675,354	32,757,833
House Furnishings	**768**	**84,064,261**	**23,928**	**22,580,127**	**32,795,275**	**72,887,652**
Books and Stationery	**2,321**	**132,739,983**	**38,143**	**49,586,742**	**37,049,911**	**125,513,235**
Vehicles and Vessels	**451**	**229,849,466**	**48,148**	**57,206,737**	**128,834,560**	**235,410,142**
Producers Materials	**6,637**	**1,400,194,926**	**186,191**	**191,294,293**	**497,944,281**	**961,155,247**
Farm materials	20	14,800,141	930	1,196,286	4,996,084	7,075,831
Manufacturers materials	1,068	1,087,763,451	121,447	134,844,615	383,224,398	734,785,070
Building materials	4,957	227,757,199	48,294	40,864,490	80,036,456	162,026,792
General materials	592	69,874,135	15,520	14,388,902	29,687,343	57,267,554
Industrial Equipment	**1,920**	**583,841,518**	**83,299**	**96,950,642**	**219,247,904**	**445,102,028**
Farming equipment	44	56,322,161	5,557	6,080,422	7,260,669	16,104,555
Manufacturing equipment	231	62,489,203	10,906	12,773,127	16,070,405	42,599,541
Trading equipment	141	8,951,528	1,684	2,004,563	1,034,995	5,138,600
Service equipment	291	32,803,839	6,439	7,677,090	12,162,007	33,538,664
Light, heat and power equipment	428	250,632,110	28,944	35,801,925	117,674,581	207,108,909
General equipment	785	172,642,677	29,769	32,613,515	65,045,247	140,611,759
Miscellaneous	**160**	**26,320,095**	**4,418**	**5,030,368**	**11,862,316**	**25,461,427**

Subsection 3.—Manufactures Classified by Origin of the Materials.

The principal statistics of the manufactures of Canada, classified upon the basis of "origin", are presented in Table **11** for the years 1924, 1926, 1929, 1933, 1935, and 1936. By this means manufacturing production may be analysed from another angle, and interesting comparisons can be made with the external trade classification according to origin (see Table **15** of the External Trade chapter).

The distinction made between farm materials of Canadian and foreign origin is based on whether the materials are indigenous to Canada rather than their actual source. Thus, the industries included in the foreign origin classes are those depending upon materials which cannot be grown in Canada, such as tea, coffee, spices, cane sugar, rice, rubber, cotton, etc., but it should be understood that industries included in the Canadian origin classes may be using large quantities of imported corn, fruit, tobacco, hides, wool, etc.

The mineral origin group includes, in addition to the non-ferrous metals so largely produced in Canada, the manufactures of iron and steel, of petroleum, and other mineral substances the raw materials of which are very largely imported. Products of mineral origin with the exception of fuels are nearly all durable goods. A high standard of living and advanced industrial organization is usually indicated by a relatively large production and consumption of mineral products. In 1936, the gross value of manufactures of mineral origin in Canada almost equalled those of farm origin, which included textiles as well as foods.

In value added in manufacture the mineral origin group advanced from second place in 1924 with 30·5 p.c. of the total value added by manufacture in all industries to first place in 1936 with 37·2 p.c. of the total. On the other hand, the manufacture of materials of farm origin receded from first place with 33·3 p.c. of the total in 1924 to second place with 32·0 p.c. of the total in 1936. The value added in manufacture of materials of forest origin was in third place at both the beginning and end of the period, but the proportion dropped from 26·0 p.c. in 1924 to 20·7 p.c. in 1936 and both the gross value and the value added were actually lower in 1936 than in 1924. These three groups accounted for about 90 p.c. of the value added.

In 1936, industries of the farm origin group had the largest number of employees but the mineral group had the greatest capital and paid out the most in salaries and wages. Industries of the mineral group had an average capital per employee of nearly $7,000 and an average salary or wage of $1,258, while for industries of the farm origin group the respective averages were $4,600 and $930.

11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924-36.

NOTE.—Figures have been revised since publication of the 1938 Year Book; see headnote to Table 1, p. 379.

Year and Origin.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
1924.						
Grand Totals	**20,709**	**2,895,317,508**	**487,610**	**534,467,675**	**1,436,190,791**[1]	**2,584,306,764**[1]
Farm Origin—						
(*a*) From field crops	4,595	525,717,571	89,436	87,789,237	433,443,376	691,513,259
Canadian origin	4,311	299,158,049	51,462	53,793,131	270,753,367	440,469,831
Foreign origin	284	226,559,522	37,974	33,996,106	162,690,009	251,043,428
(*b*) From animal husbandry	4,068	247,073,900	63,052	65,424,526	282,604,516	407,766,406
Canadian origin	4,068	247,073,900	63,052	65,424,526	282,604,516	407,766,406
Totals, Farm Origin	**8,663**	**772,791,471**	**152,488**	**153,213,763**	**716,047,892**	**1,099,279,665**
Canadian origin	8,379	546,231,949	114,514	119,217,657	553,357,883	848,236,237
Foreign origin	284	226,559,522	37,974	33,996,106	162,690,009	251,043,428
Wild life origin	226	10,837,249	2,944	3,194,213	7,506,169	13,386,266
Marine origin	836	20,304,785	11,157	3,344,348	16,089,332	26,637,962
Forest origin	6,873	876,149,932	126,907	147,719,245	245,183,429	544,282,597
Mineral origin	2,806	1,010,517,944	136,837	171,068,497	349,800,585	700,002,097
Mixed origin	1,305	204,716,127	57,277	55,927,609	101,563,384	200,718,177
1926.						
Grand Totals	**21,301**	**3,208,071,197**	**559,161**	**625,682,242**	**1,726,520,016**[1]	**3,114,693,230**[1]
Farm Origin—						
(*a*) From field crops	4,697	565,932,312	99,200	95,403,666	486,522,508	773,023,228
Canadian origin	4,434	323,033,863	56,017	54,719,806	299,452,868	486,709,022
Foreign origin	263	242,898,449	43,183	40,683,860	187,069,640	286,314,206
(*b*) From animal husbandry	4,137	248,759,804	65,939	69,690,146	333,770,293	467,253,826
Canadian origin	4,137	248,759,804	65,939	69,690,146	333,770,293	467,253,826
Totals, Farm Origin	**8,834**	**814,692,116**	**165,139**	**165,093,812**	**820,292,801**	**1,240,277,054**
Canadian origin	8,571	571,793,667	121,956	124,409,952	633,223,161	953,962,848
Foreign origin	263	242,898,449	43,183	40,683,860	187,069,640	286,314,206
Wild life origin	232	13,321,668	3,662	4,328,731	12,459,350	21,775,688
Marine origin	831	28,868,071	17,408	5,622,837	22,034,129	36,190,764
Forest origin	6,710	926,726,166	133,428	159,969,652	260,039,864	597,551,657
Mineral origin	3,284	1,200,704,022	173,515	226,802,705	489,898,292	982,103,019
Mixed origin	1,410	223,759,154	66,009	63,864,505	121,795,580	236,795,048

---

[1] For the years 1924 and 1926 the figures for "cost of materials" and "gross value of products" include the value placed on intermediate products used in further processes in the chemical group of industries. For this reason these figures differ slightly from those contained in the other tables of this chapter.

11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924-36—continued.

Year and Origin.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
	No.	$	No.	$	$	$
1929.						
Grand Totals	**22,216**	**4,004,892,009**	**666,531**	**777,291,217**	**2,029,670,813**	**3,883,446,116**
Farm Origin—						
(*a*) From field crops	5,191	697,206,163	114,236	115,201,292	496,842,580	889,075,246
Canadian origin	4,893	436,282,846	67,234	67,235,530	326,292,523	598,311,861
Foreign origin	298	260,923,317	47,002	47,965,762	170,550,057	290,763,385
(*b*) From animal husbandry	3,850	272,178,703	67,446	73,105,463	355,763,503	507,694,323
Canadian origin	3,850	272,178,703	67,446	73,105,463	355,763,503	507,694,323
Totals, Farm Origin	**9,041**	**969,384,866**	**181,682**	**188,306,755**	**852,606,083**	**1,396,769,569**
Canadian origin	8,743	708,461,549	134,680	140,340,993	682,056,026	1,106,006,184
Foreign origin	298	260,923,317	47,002	47,965,762	170,550,057	290,763,385
Wild life origin	234	14,338,686	3,767	4,783,323	12,847,817	20,861,039
Marine origin	730	28,644,442	16,367	5,411,855	21,496,859	34,966,260
Forest origin	7,353	1,148,558,242	163,863	191,044,307	313,088,964	722,269,066
Mineral origin	3,219	1,550,662,908	218,879	304,027,803	678,683,203	1,392,499,868
Mixed origin	1,639	293,302,865	81,973	83,717,174	150,947,887	316,080,314
1933.						
Grand Totals	**23,780**	**3,279,259,838**	**468,658**	**436,247,824**	**967,788,928**	**1,954,075,785**
Farm Origin—						
(*a*) From field crops	5,746	609,044,529	93,433	81,655,182	263,007,043	494,048,930
Canadian origin	5.424	393,913,114	59,378	51,750,819	173,684,115	322,289,909
Foreign origin	322	215,131,415	34,055	29,904,363	89,322,928	171,759,021
(*b*) From animal husbandry	3,949	235,537,529	65,169	56,056,567	191,875,661	297,907,540
Canadian origin	3.949	235,537,529	65,169	56,056,567	191,875,661	297,907,540
Totals, Farm Origin	**9,695**	**844,582,058**	**158,602**	**137,711,749**	**454,882,704**	**791,956,470**
Canadian origin	9,373	629,450,643	124,547	107,807,386	365,559,776	620,197,449
Foreign origin	322	215,131,415	34,055	29,904,363	89,322,928	171,759,021
Wild life origin	335	10,507,157	3,498	3,481,885	7,159,079	13,000,927
Marine origin	620	15,532,775	4,064	2,287,385	10,960,289	17,380,323
Forest origin	7,796	882,445,602	102,807	99,046,012	133,550,374	335,886,257
Mineral origin	3,539	1,306,641,651	130,565	138,101,092	271,434,337	601,428,003
Mixed origin	1,795	219,550,595	69,122	55,619,701	89,802,145	194,423,805
1935.						
Grand Totals	**24,034**	**3,216,403,127**	**556,664**	**559,467,777**	**1,419,146,217**	**2,653,911,209**
Farm Origin—						
(*a*) From field crops	5,620	592,460,185	102,120	92,346,954	332,576,494	594,405,019
Canadian origin	5,268	385,787,001	64,088	58,212,158	219,828,843	392,090,889
Foreign origin	352	206,673,184	38,032	34,134,796	112,747,651	202,314,130
(*b*) From animal husbandry	3,881	242,276,644	74,556	67,115,718	264,608,357	389,696,072
Canadian origin	3,881	242,276,644	74,556	67,115,718	264,608,357	389,696,072
Totals, Farm Origin	**9,501**	**834,736,829**	**176,676**	**159,462,672**	**597,184,851**	**984,101,091**
Canadian origin	9,149	628,063,645	138,644	125,327,876	484,437,200	781,786,961
Foreign origin	352	206,673,184	38,032	34,134,796	112,747,651	202,314,130
Wild life origin	322	11,432,808	3,724	3,797,913	8,163,673	13,893,417
Marine origin	630	17,144,806	4,766	2,874,553	14,772,722	23,458,356
Forest origin	8,058	862,608,889	120,578	123,959,435	173,104,957	432,743,826
Mineral origin	3,603	1,260,176,377	171,051	202,180,299	511,639,555	961,973,179
Mixed origin	1,920	230,303,418	79,869	67,192,905	114,280,459	237,741,340

11.—Principal Statistics of the Manufacturing Industries of Canada, Classified According to the Origin of the Material Used, by Main Groups for Representative Years 1924-36—concluded.

Year and Origin.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.
1936.	No.	$	No.	$	$	$
Grand Totals	**24,202**	**3,271,263,531**	**594,359**	**612,071,434**	**1,624,213,996**	**3,002,403,814**
Farm Origin—						
(*a*) From field crops	6,042	621,273,209	110,000	103,311,060	387,870,445	691,001,191
Canadian origin	5,267	399,167,986	67,353	63,080,019	256,931,499	450,793,956
Foreign origin	775	222,105,223	42,647	40,231,041	130,938,946	240,207,235
(*b*) From animal husbandry	3,912	253,730,953	79,361	72,356,777	303,076,995	440,171.338
Canadian origin	3,912	253,730,953	79,361	72,356,777	303,076,995	440,171,338
Totals, Farm Origin	**9,954**	**875,004,162**	**189,361**	**175,667,837**	**690,947,440**	**1,131,172,529**
Canadian origin	9,179	652,898,939	146,714	135,436,796	560,008,494	890,965.294
Foreign origin	775	222,105,223	42,647	40,231,041	130,938,946	240,207,235
Wild life origin	345	12,822,777	3,952	4,140,861	9,489,349	15,991,697
Marine origin	624	18,614,592	5,252	3,279,581	16,459,938	26,684,801
Forest origin	8,080	864,302,280	129,900	137,426,273	204,820,245	490,306,490
Mineral origin	3,301	1,293,369,809	185,581	223,553,588	584,795,869	1,097,328,476
Mixed origin	1,898	207,149,911	80,313	68,003,294	117,701,155	240,919,821

Subsection 4.—The Forty Leading Manufacturing Industries.

In the following statement, the rank of the ten leading industries in 1936, from the standpoint of gross value of production, is compared with their respective ranks in representative years since 1922.

THE TEN LEADING INDUSTRIES, 1936, COMPARED AS TO RANK FOR REPRESENTATIVE YEARS 1922-35.

Industry.	Rank in—						
	1936.	1935.	1934.	1933.	1929.	1926.	1922.
Non-ferrous metal smelting and refining	1	1	2	2	9	9	-
Pulp and paper	2	2	1	1	1	1	2
Slaughtering and meat packing	3	3	3	3	2	3	3
Flour and feed mills	4	6	4	4	3	2	1
Butter and cheese	5	5	5	5	6	6	5
Automobiles	6	4	7	11	4	5	6
Petroleum products	7	7	6	6	10	11	9
Sawmills	8	8	11	14	5	4	4
Electrical apparatus and supplies	9	9	14	16	8	13	17
Cotton yarn and cloth	10	11	8	8	13	8	7

A prominent feature of Canadian manufacturing development in recent years has been the growth of non-ferrous metal smelting. This industry, based upon mineral resources, has now taken its place among the leading manufactures along with the industries based upon forest, agricultural and live-stock resources.

The incidence of the depression resulted in a re-arrangement in the rank of many industries which has already proved temporary in some cases. The suspension or curtailment of capital expenditures greatly reduced the output of such important industries as: sawmills, electrical equipment, automobiles, railway rolling-stock, primary iron and steel, machinery, etc. On the other hand, the demand for goods for immediate consumption was more stable, including such industries as: petroleum products, bakeries, cotton yarn and cloth, printing and publishing, clothing, tobacco, beverages, etc.

Since the statistics of the forty leading industries in 1937 were completed before this chapter went to press, they have been included here in Table **12A**.

12.—Principal Statistics of the Forty Leading Industries of Canada, Ranked According to Gross Value of Products, 1936.

	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Value of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
1	Non-ferrous metal smelting and refining	15	143,858,717	10,015	14,346,050	154,604,285	71,276,645	229,737,420
2	Pulp and paper	93	539,350,001	30,054	40,063,852	72,202,983	87,150,666	185,144,603
3	Slaughtering and meat packing	142	61,806,675	11,776	13,921,410	126,630,086	29,028,206	156,971,640
4	Flour and feed mills	1,118	61,867,287	5,685	5,542,945	90,614,236	22,680,670	114,617,099
5	Butter and cheese	2,573	60,201,575	15,545	14,772,250	80,983,372	30,018,633	112,712,327
6	Automobiles	16	46,497,259	12,933	18,164,042	71,201,646	33,450,762	105,350,035
7	Petroleum products	63	61,883,926	5,019	7,309,955	66,555,885	15,313,844	85,802,363
8	Sawmills	3,638	78,294,341	28,786	21,357,038	43,598,856	35,982,667	80,343,291
9	Electrical apparatus and supplies	186	79,794,524	17,037	19,501,882	30,484,468	40,616,138	72,288,548
10	Cotton yarn and cloth	35	71,564,646	17,910	14,218,231	37,042,911	26,636,505	65,635,365
11	Bread and other bakery products	3,101	46,108,482	19,598	17,703,572	32,124,708	31,458,312	65,558,437
12	Rubber goods, including footwear	50	64,600,479	11,881	11,954,016	23,598,661	37,199,378	62,054,808
13	Printing and publishing	789	53,273,296	17,377	24,035,719	11,967,553	45,559,802	58,275,911
14	Railway rolling-stock	37	83,258,169	18,633	22,161,277	30,486,569	24,701,059	56,969,453
15	Clothing, factory, women's	583	25,114,251	18,924	15,255,725	32,706,792	23,187,289	56,118,773
16	Hosiery and knitted goods	168	51,398,678	19,429	15,120,277	24,360,941	24,337,987	49,469,140
17	Fruit and vegetable preparations	304	41,572,514	9,258	6,066,761	27,455,449	19,215,422	47,337,397
18	Primary iron and steel	55	92,103,774	11,138	13,830,377	21,424,052	19,772,711	46,636,892
19	Biscuits, confectionery, cocoa, etc.	206	39,802,756	11,201	10,101,275	22,191,155	23,120,592	46,051,641
20	Breweries	70	55,969,772	4,604	6,517,804	15,540,509	27,796,122	44,047,794
21	Machinery	218	61,206,866	10,277	12,305,422	15,761,565	25,005,145	41,447,473
22	Clothing, factory, men's	188	18,570,959	10,578	10,255,745	22,728,166	17,647,628	40,526,745
23	Sugar refineries	10	33,199,993	2,559	3,413,698	27,924,998	11,430,093	40,405,377
24	Tobacco, cigars, and cigarettes	95	58,785,097	7,593	7,207,737	20,111,289	20,020,045	40,287,359
25	Sheet metal products	138	50,323,623	7,482	7,942,190	22,617,288	16,796,358	39,994,151
26	Coke and gas products	42	93,088,722	4,116	5,714,483	16,585,571	20,505,282	39,871,898
27	Boots and shoes, leather	219	25,318,549	15,961	11,622,002	18,889,035	16,372,950	35,543,115
28	Printing and bookbinding	1,224	41,738,465	12,677	14,509,486	12,404,562	22,243,119	35,099,335
29	Automobile supplies	85	24,730,610	6,842	7,776,726	18,453,840	14,203,086	33,378,508
30	Castings and forgings	238	46,429,034	10,391	11,225,938	11,524,940	18,184,280	31,011,884
31	Silk and artificial silk	35	34,947,643	10,189	8,877,373	10,732,371	15,221,509	26,930,821
32	Fish curing and packing	624	18,614,592	5,252	3,279,581	16,459,938	9,837,729	26,684,801
33	Coffee, tea and spices	92	13,347,535	2,086	2,364,413	19,140,291	7,172,270	26,412,092
34	Boxes and bags, paper	141	20,919,171	5,902	5,761,998	14,310,960	11,022,583	25,588,431
35	Brass and copper products	126	22,890,531	4,596	5,293,457	14,182,328	10,198,031	24,947,467
36	Furnishing goods, men's	176	16,626,096	9,410	6,363,980	14,743,645	9,735,990	24,625,615
37	Leather tanneries	87	23,627,727	4,306	4,227,441	15,394,863	7,379,439	23,294,210
38	Paints, pigments and varnishes	78	23,274,558	3,124	4,428,387	10,817,694	11,544,616	22,651,225
39	Medicinal and pharmaceutical preparations	169	20,760,912	3,857	4,797,458	7,384,370	14,697,547	22,251,550
40	Furniture	425	26,577,141	9,677	8,111,877	9,251,878	12,460,577	22,177,929
	Totals, Forty Leading Industries	**17,652**	**2,433,298,946**	**443,678**	**457,423,850**	**1,335,194,709**	**960,181,687**	**2,364,252,923**
	Totals, All Industries	**24,202**	**3,271,263,531**	**594,359**	**612,071,434**	**1,624,213,996**	**1,289,592,672**	**3,002,403,814**
	Percentages of forty leading industries to all industries	72·9	74·4	74·6	74·7	82·2	74·5	78·7

12A.—Principal Statistics of the Forty Leading Industries of Canada, Ranked According to the Gross Value of the Products, 1937.

	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Value of Products.	
							Net.	Gross.
		No.	$	No.	$	$	$	$
1	Non-ferrous metal smelting and refining	14	162,696,595	11,570	17,990,947	201,862,965	101,807,865	318,278,251
2	Pulp and paper	98	570,352,287	33,205	48,757,795	91,121,629	106,002,017	226,244,711
3	Slaughtering and meat packing	138	65,411,606	13,070	17,085,008	148,057,651	31,955,352	181,419,311
4	Automobiles	15	57,996,242	14,946	22,138,991	92,706,147	41,272,815	134,810,280
5	Flour and feed mills	1,086	56,280,032	5,803	5,877,756	111,558,331	20,854,356	133,634,179
6	Butter and cheese	2,568	60,001,842	16,583	15,699,085	91,175,996	31,990,975	124,935,055
7	Sawmills	3,836	90,405,105	33,917	27,173,872	57,280,080	46,727,302	104,849,785
8	Electrical apparatus and supplies	191	97,187,905	21,706	26,291,436	41,695,446	55,815,297	98,841,992
9	Petroleum products	57	64,280,266	5,137	8,246,843	80,401,880	13,602,129	98,454,014
10	Railway rolling-stock	37	88,426,476	21,496	29,187,157	56,191,146	35,573,335	93,854,555
11	Bread and other bakery products	3,179	49,164,576	21,252	19,759,740	39,498,456	34,774,337	76,462,891
12	Rubber goods (including footwear)	50	65,119,212	13,035	14,041,066	31,126,755	41,797,481	74,263,753
13	Primary iron and steel	55	96,875,377	14,054	19,926,498	33,805,631	31,541,030	72,280,669
14	Cotton yarn and cloth	36	67,832,556	19,160	16,350,956	42,063,654	27,980,994	72,113,878
15	Printing and publishing	779	53,235,912	17,834	25,189,376	12,990,521	47,231,468	60,982,409
16	Clothing, factory, women's	593	26,734,768	19,981	16,926,471	34,915,469	25,460,429	60,610,755
17	Machinery	214	66,323,206	12,638	16,059,392	22,204,200	34,133,371	57,096,816
18	Hosiery and knitted goods	171	51,666,165	20,250	16,228,813	26,446,763	25,654,274	52,855,754
19	Fruit and vegetable preparations	348	47,488,051	10,630	7,194,477	30,620,211	18,944,102	50,289,711
20	Biscuits, confectionery, cocoa, etc	223	38,565,652	11,879	10,892,004	24,351,815	24,352,071	49,475,403
21	Sheet metal products	148	56,527,585	8,499	9,518,325	28,338,113	20,149,241	49,132,766
22	Automobile supplies	88	28,440,176	8,416	10,358,098	26,631,014	19,150,666	46,631,643
23	Clothing, factory, men's	198	20,868,845	12,176	12,135,443	25,594,619	19,490,283	45,249,174
24	Tobacco, cigars, and cigarettes	93	59,359,240	7,920	7,578,110	23,169,834	21,772,913	45,110,135
25	Breweries	65	64,162,671	5,151	7,904,517	18,155,465	24,552,091	43,485,071
26	Castings and forgings	231	48,814,929	12,164	14,333,923	17,091,230	23,316,898	41,913,753
27	Coke and gas products	33	91,911,250	4,027	5,709,569	17,217,957	21,578,880	41,702,929
28	Boots and shoes, leather	221	27,374,704	16,773	13,026,642	22,295,404	18,512,102	41,088,713
29	Sugar refineries	10	35,413,781	2,332	3,318,861	29,013,057	10,951,571	40,916,044
30	Printing and bookbinding	1,238	42,091,744	13,358	15,589,840	13,747,403	23,547,011	37,758,604
31	Brass and copper products	125	23,686,294	5,094	6,310,384	21,498,095	12,329,104	34,453,160
32	Boxes and bags, paper	147	23,400,776	6,637	6,767,971	17,097,334	12,649,984	30,035,299
33	Silk and artificial silk	29	34,135,176	10,246	9,099,437	10,453,196	16,407,382	27,871,292
34	Coffee, tea, and spices	90	15,495,053	2,149	2,657,789	20,691,430	6,241,184	27,035,275
35	Furnishing goods, men's	195	17,722,232	10,073	7,173,314	16,053,321	10,567,996	26,761,676
36	Furniture	435	27,445,103	10,804	9,481,946	10,965,149	15,078,642	26,518,767
37	Leather tanneries	83	24,596,637	4,382	4,576,703	18,592,794	7,158,060	26,269,794
38	Fish curing and packing	597	18,130,385	5,427	3,354,771	16,318,781	9,372,593	26,088,625
39	Paints, pigments, and varnishes	82	23,853,360	3,324	4,827,199	12,307,011	12,918,331	25,531,117
40	Planing mills, sash and door factories	669	29,653,158	8,369	7,380,636	12,772,336	11,702,460	24,947,718
	Totals, Forty Leading Industries	**18,465**	**2,589,126,930**	**495,467**	**542,121,161**	**1,648,078,289**	**1,114,918,392**	**2,850,255,727**
	Totals, All Industries	**24,834**	**3,465,227,831**	**660,451**	**721,727,037**	**2,006,926,787**	**1,506,624,867**	**3,623,159,500**
	Percentages of forty leading industries to all industries	74·4	74·7	75·0	75·1	82·1	74·0	78·7

Section 3.—Provincial Distribution of Manufacturing Production.

Ontario and Quebec are the most important manufacturing provinces of Canada. Their combined production in 1936 amounted to $2,411,000,000 or over 80 p.c. of the gross value of manufactured products of the Dominion. The proximity of Ontario to the coal-fields of Pennsylvania, the water power and other varied resources of the two provinces, and their nearness to the larger markets of Canada and the United States have all contributed to the above result. British Columbia had in 1936 the third largest gross manufacturing production, with 7·2 p.c. of the total, and Manitoba the fourth with 4·1 p.c. Alberta, Nova Scotia, New Brunswick, Saskatchewan, and Prince Edward Island followed in the order named.

Subsection 1.—The Manufactures of the Maritime Provinces, 1936.

Table 13 gives statistics of the leading industries in each of the Maritime Provinces in 1936. In Prince Edward Island the predominant fishery and agricultural resources make fish curing and packing, butter and cheese, and slaughtering and meat packing the leading manufactures of the province. Nova Scotia is renowned for its coal mines and its fisheries, but it has also extensive forests and agricultural lands and is favoured with easy access by sea to the high-grade iron ore supply of Newfoundland. These resources give rise to its leading manufactures of primary iron and steel, fish curing and packing, pulp and paper, railway rolling-stock, and butter and cheese. The forests of New Brunswick give a leading place to its pulp and paper and sawmilling industries, although manufactures of fish and agricultural products add to the varied output of the province.

13.—Statistics of the Leading Industries of Each of the Maritime Provinces, 1936.

Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
	No.	$	No.	$	$	$
PRINCE EDWARD ISLAND.						
1 Fish curing and packing	93	219,119	289	70,503	524,883	680,283
2 Butter and cheese	25	257,841	87	57,475	497,977	624,834
3 Slaughtering and meat packing	3	151,435	50	37,085	371,626	444,988
4 Printing and publishing	4	266.483	99	82,732	21,889	169,656
5 Foods, stock and poultry	3	62,932	25	27,850	103,816	162,235
6 Flour and feed mills	12	66,579	15	6,331	97,630	139,662
7 Bread and other bakery products	10	103,131	45	28,770	78,251	129,047
8 Castings and forgings	3	336,499	54	48,771	23,568	120,288
9 Sawmills	51	139,963	80	16,421	63,095	118,138
10 All other leading industries[2]	3	133,285	50	32,262	246,445	313,693
Totals, Leading Industries	**207**	**1,737,267**	**794**	**408,200**	**2,029,180**	**2,902,824**
Totals, All Industries	**233**	**2,394,532**	**996**	**553,008**	**2,200,028**	**3,311,223**

For footnotes see end of table on p. 411.

13.—Statistics of the Leading Industries of Each of the Maritime Provinces, 1936—concluded.

	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
		No.	$	No.	$	$	$
	NOVA SCOTIA.						
1	Primary iron and steel	6	20,112,270	1,996	2,553,168	5,154,383	10,108,447
2	Fish curing and packing	172	3,172,962	1,934	1,029,427	3,917,817	6,164,488
3	Pulp and paper	5	12,837,117	721	1,005,401	1,464,082	4,838,595
4	Railway rolling-stock	3	3,749,404	305	295,958	1,846,354	2,513,046
5	Butter and cheese	29	1,183,166	290	296,701	1,572,690	2,361,193
6	Hosiery and knitted goods	3	2,000,494	735	547,763	1,089,935	2,257,260
7	Biscuits, confectionery, cocoa, etc.	8	2,281,453	768	676,445	929,168	2,143,435
8	Sawmills	498	1,510,381	1,655	454,924	1,123,634	2,049,412
9	Printing and publishing	34	1,902,966	694	809,181	336,531	1,924,313
10	Bread and other bakery products	73	698,221	366	257,570	744,244	1,321,663
11	Castings and forgings	10	1,821,267	468	486,488	407,025	1,193,100
12	All other leading industries[2]	6	18,312,004	1,573	1,890,755	10,958,349	17,688,914
	Totals, Leading Industries	**847**	**69,581,705**	**11,505**	**10,303,781**	**29,544,212**	**54,563,866**
	Totals, All Industries	**1,158**	**87,888,353**	**15,944**	**13,784,556**	**36,077,900**	**67,784,970**
	NEW BRUNSWICK.						
1	Pulp and paper	6	35,563,508	2,379	2,823,931	5,871,548	15,130,679
2	Sawmills	279	4,798,932	2,326	1,080,541	2,537,452	4,720,350
3	Coffee, tea, and spices	5	1,426,777	191	164,131	2,487,774	3,408,448
4	Fish curing and packing	129	2,240,964	757	297,180	1,707,076	2,768,926
5	Biscuits, confectionery, cocoa, etc.	6	1,541,626	601	421,736	834,898	1,676,727
6	Butter and cheese	31	1,122,416	217	197,277	1,033,123	1,579,120
7	Slaughtering and meat packing	7	510,938	161	157,499	1,139,483	1,287,466
8	Bread and other bakery products	71	748,373	360	260,151	670,064	1,168,424
9	Heating and cooking apparatus	3	1,413,271	405	414,802	363,832	1,127,007
10	Printing and publishing	24	1,327,489	401	500,521	154,504	1,043,983
11	All other leading industries[2]	6	13,791,523	2,513	2,657,772	6,985,276	11,535,867
	Totals, Leading Industries	**567**	**64,485,817**	**10,311**	**8,975,541**	**23,785,030**	**45,446,997**
	Totals, All Industries	**784**	**81,468,098**	**13,710**	**11,855,051**	**29,292,851**	**56,225,201**

[1] Net value is derived from gross value by deducting costs of materials, fuel, and electricity. [2] Individual statistics cannot be given because there are fewer than three establishments in each industry. Such industries are: in Prince Edward Island, cotton and jute bags, sheet metal products, and fertilizers; in Nova Scotia, sugar refineries, cotton yarn and cloth, wire and wire goods, coke and gas, and petroleum products; in New Brunswick, sugar refineries, railway rolling-stock, and cotton yarn and cloth.

Subsection 2.—The Manufactures of Quebec, 1936.

Among the assets of Quebec which have tended to develop manufacturing industries in the province, may be mentioned its natural resources of forests, water powers, minerals, and agricultural lands, and also its geographic position astride the St. Lawrence estuary permitting sea-going shipping to reach its main centres of population. Added to these natural advantages, there is a stable and industrious population, which is an important factor in industries such as textiles, clothing, boots and shoes, etc., where a large labour force is required.

The most notable change among the manufactures of Quebec in recent years has been the development of the non-ferrous metal smelting industry. This industry first appeared among the forty leading industries of the province in nineteenth place in 1927. It was in second place in 1935 and 1936. The petroleum-refining industry has also expanded and risen in importance during about the same period.

The importance of the pulp and paper industry in Quebec is shown by comparison with the industry throughout Canada. The Quebec section of the industry, in addition to supplying about 10 p.c. of the total gross value of all products manufactured in the province, furnished 48 p.c. of the products of pulp and paper mills throughout the country. The gross value of cotton yarn and cloth products from Quebec mills formed 69 p.c., the value of railway rolling-stock 46 p.c., the value of tobacco, cigars, and cigarettes 85 p.c., and the value of boots and shoes 58 p.c. of the Dominion totals for these products.

14.—Statistics of the Leading Industries of the Province of Quebec, 1936.

	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
		No.	$	No.	$	$	$
1	Pulp and paper	41	263,914,480	14,570	18,544,953	33,132,626	88,854,952
2	Non-ferrous metal smelting	4	27,917,462	1,452	2,029,032	38,861,842	54,296,636
3	Cotton yarn and cloth	14	46,843,842	11,603	9,172,969	26,855,843	45,534,135
4	Clothing, women's, factory	304	15,297,322	11,295	8,938,490	21,243,533	35,919,769
5	Tobacco, cigars, and cigarettes	57	50,042,412	6,325	5,978,367	17,176,641	34,156,617
6	Butter and cheese	1,213	15,721,628	4,588	3,362,006	23,244,433	30,262,103
7	Slaughtering and meat packing	33	10,170,742	1,952	2,177,097	23,833,917	28,264,075
8	Petroleum products	7	21,022,130	1,067	1,670,552	20,753,097	27,504,940
9	Railway rolling-stock	11	35,808,519	8,255	10,215,364	14,350,747	26,154,991
10	Clothing, men's, factory	123	11,305,982	5,697	5,141,792	14,646,828	25,200,973
11	Boots and shoes, leather	131	14,262,275	10,255	6,758,889	11,021,957	20,501,021
12	Silk and artificial silk	24	24,125,165	7,208	6,265,944	8,180,115	19,685,667
13	Bread and other bakery products	973	11,774,481	5,216	4,263,717	8,657,037	17,218,232
14	Electrical apparatus and supplies	29	20,753,954	4,200	5,131,330	6,638,899	15,701,098
15	Hosiery and knitted goods	53	14,910,764	6,233	4,493,683	7,430,443	15,199,088
16	Breweries	8	18,967,242	1,492	2,126,400	5,980,613	14,368,495
17	Printing and publishing	72	13,109,893	4,330	5,478,533	2,773,419	13,222,286
18	Flour and feed mills	233	6,295,888	770	821,138	10,411,167	13,048,235
19	Biscuits, confectionery, cocoa, etc.	48	8,879,608	3,124	2,500,114	6,903,287	12,418,576
20	Sawmills	1,492	12,289,603	5,968	2,569,181	6,452,167	11,871,123
21	Machinery	36	19,600,145	3,391	4,072,211	4,580,848	11,524,968
22	Rubber goods, including footwear	13	11,172,954	3,331	2,716,089	4,110,062	11,489,739
23	Furnishing goods, men's	78	7,207,070	4,594	2,785,974	7,239,923	11,474,423
24	Coke and gas products	5	12,652,318	800	1,261,939	3,124,228	10,226,647
25	Sheet metal products	27	12,161,784	2,105	2,130,551	5,862,607	10,007,204
26	Paints, pigments, and varnishes	22	11,684,568	1,166	1,754,728	4,621,539	9,123,233
27	Printing and bookbinding	349	10,902,640	3,431	3,661,028	3,023,539	8,801,532
28	Castings and forgings	54	12,348,915	2,323	2,353,767	2,947,650	7,253,738
29	Aerated and mineral waters	128	5,636,028	1,318	1,337,170	2,197,511	7,225,856
30	Coffee, tea, and spices	21	2,868,357	515	589,504	4,920,556	7,130,039
31	Medicinal and pharmaceutical preparations	65	7,571,360	1,294	1,651,953	2,159,862	7,051,447
32	Brass and copper products	30	7,410,962	1,282	1,494,746	3,987,905	7,012,020
33	Fur goods	123	5,291,959	1,365	1,473,698	4,595,829	6,829,627
34	Boxes and bags, paper	37	6,615,274	1,752	1,502,066	3,629,522	6,827,150
35	Distilleries	5	10,775,547	684	708,033	1,319,738	6,785,879
36	Fruit and vegetable preparations	57	5,631,773	1,603	952,619	4,108,539	6,579,100
37	Miscellaneous textiles	8	8,977,738	1,019	1,246,749	2,749,784	6,064,182
38	Foods, miscellaneous	41	3,791,065	717	761,861	2,233,770	5,862,312
39	Furniture	99	6,522,613	2,503	1,914,309	2,218,103	5,657,412
40	Hats and caps	75	2,878,812	2,036	1,778,914	2,815,447	5,623,518
	Totals, Forty[2] Leading Industries	**6,143**	**815,115,274**	**152,829**	**143,787,460**	**380,995,573**	**707,933,038**
	Totals, All Industries	**7,969**	**1,029,546,039**	**194,876**	**182,319,454**	**455,027,759**	**863,687,389**
	Percentages of forty leading industries to totals of all industries in the province	77·1	79·2	78·4	78·9	83·7	82·0

[1] See footnote 1 to Table 13.

[2] Statistics for sugar refining, which is also one of the leading industries of this province, cannot be published, since there are less than three establishments reporting.

Subsection 3.—The Manufactures of Ontario, 1936.

Ontario is the most important manufacturing province of the Dominion. The gross value of its manufactured products in 1936 represented about 51·5 p.c. of the total for the whole Dominion, while that of Quebec, the second province in importance in this respect, amounted to about 29 p.c. This premier position in manufacturing has been fairly uniformly maintained by Ontario over a long period, as the following percentages show: in 1926, 52 p.c.; 1918, 53 p.c.; 1910, 50 p.c.; 1900, 50 p.c., 1890, 51 p.c.; and 1880, 51 p.c. Thus, in spite of the rapid industrial development in recent years in other provinces, such as Quebec, British Columbia, and Manitoba, Ontario is maintaining a manufacturing production roughly equal to that of the remainder of the Dominion.

The geographic position of Ontario on the Great Lakes waterway system, by means of which the iron ore of Minnesota and the coal of Pennsylvania are readily accessible, has resulted in a greater development of the iron and steel industries in this province than in any other. The province is endowed with a wide range of natural resources of forests, minerals, water powers, and agriculture. Its large population and central position in Canada, with excellent water and rail transportation facilities to other parts of the country, have encouraged industrial development. Other factors in this development have been its proximity to one of the most densely populated sections of the United States and the establishment within the province of branch factories of United States industries as in automobile manufacturing.

The depression was particularly hard on industries producing capital or durable goods, and these constitute an important factor in the manufactures of Ontario. Thus, production was disproportionately curtailed in such important industries as automobiles, electrical equipment, machinery, agricultural implements, primary iron and steel, etc. This resulted not only in a drop in the rank of such industries within the province, but in a lowering of the manufacturing production of the whole province relatively to that of other provinces less affected by these influences. Since 1933, however, these industries in general have made a good recovery, and Ontario, which accounted for 49 p.c. of the gross value of all products manufactured in the Dominion in 1933, had by 1936 increased the relative value to 51·5 p.c.

Outstanding among industries in which the province of Ontario was pre-eminent, was that of automobile manufacturing, which was carried on practically in this province alone. Other important industries in which Ontario led, with the percentage which the production of each bore to that of the Dominion in 1936, were as follows: agricultural implements, 96 p.c.; leather tanneries, 89 p.c.; rubber goods, 81 p.c.; furniture, 61 p.c.; fruit and vegetable canning, preserving, etc., 70 p.c.; electrical apparatus and supplies, 77 p.c.; castings and forgings, 64 p.c.; primary iron and steel, 64 p.c.; slaughtering and meat packing, 42 p.c.; flour and feed mills, 55 p.c.; hosiery and knitted goods, 62 p.c.

15.—Statistics of the Leading Industries of the Province of Ontario, 1936.

	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
		No.	$	No.	$	$	$
1	Non-ferrous metal smelting	8	82,614,689	5,323	7,722,117	87,646,185	137,344,892
2	Automobiles	11	45,204,693	12,653	17,748,655	70,199,196	103,751,229
3	Slaughtering and meat packing	60	28,277,962	4,619	5,742,655	51,501,439	65,339,616
4	Flour mills	637	25,788,874	3,013	2,690,904	50,346,695	62,965,447
5	Pulp and paper	34	170,720,720	9,145	13,185,738	25,467,091	59,166,958
6	Electrical apparatus and supplies	134	58,400,322	12,629	14,132,231	23,501,825	55,800,685
7	Butter and cheese	983	26,591,699	7,091	7,097,301	35,952,151	50,722,285
8	Rubber goods	34	53,384,026	8,523	9,216,801	19,474,037	50,519,863
9	Fruit and vegetable preparations	153	29,931,437	5,521	3,768,366	18,765,112	32,995,927
10	Automobile supplies	62	24,200,414	6,625	7,529,651	18,215,008	32,752,442
11	Bread and other bakery products	1,271	21,857,920	9,641	9,287,758	15,255,916	32,266,097
12	Hosiery and knitted goods	96	33,111,447	11,949	9,722,147	15,239,635	30,810,103
13	Primary iron and steel	25	57,527,056	6,686	8,720,512	13,854,120	30,019,258
14	Machinery	150	39,039,620	6,442	7,704,223	10,734,594	28.532,769
15	Printing and publishing	293	23,467,197	7,618	11,171,917	6,330,770	28,201,017
16	Petroleum products	14	20,861,503	2,064	2,917,761	21,729,194	26,532,661
17	Biscuits, confectionery, cocoa, etc.	85	24,017,831	5,724	5,691,637	11,791,672	26,090,054
18	Sheet metal products	75	27,549,181	4,366	4,844,093	12,680,566	23,626,382
19	Coke and gas products	22	53,385,545	2,449	3,407,555	9,942,259	22,562,214
20	Leather tanneries	32	20,996,236	3,662	3,690,195	13,894,635	20,707,959
21	Castings and forgings	119	26,415,107	6,407	7,033,101	7,414,069	19,716,937
22	Printing and bookbinding	553	22,081,676	6,597	7,830,872	7,220,375	19.640,684
23	Breweries	29	19,334,238	1,887	2,629,085	5,764,108	17,960,108
24	Clothing, women's, factory	232	8,442,908	6,323	5,347,291	9,459,696	16,933,879
25	Brass and copper products	79	13,903,586	2,835	3,309,717	9,542,984	16,278,402
26	Cotton yarn and cloth	16	17,850,530	4,985	3,995,115	8,305,833	16,160,857
27	Boxes and bags, paper	81	11.853,419	3,544	3,616,560	9,110,879	15,838,371
28	Woollen cloth	35	14,938,009	4,661	4,082,595	8,296,809	15,560,110
29	Agricultural implements	26	55,285,112	5,294	5,850,840	6,957,063	15,385,517
30	Clothing, men's, factory	50	6,520,322	4,424	4,763,996	7,342,541	14,093,591
31	Medicinal and pharmaceutical preparations	86	11,883,508	2,350	2,924,191	4,727,552	13,781,231
32	Boots and shoes, leather	70	9,679,819	5,217	4,476,010	7,120,152	13,746,493
33	Furniture	220	17,547,291	6,001	5,179,916	5,673,173	13,487,809
34	Acids, alkalies, and salts	12	19,537,744	1,715	2,396,157	3,107,967	13,437,273
35	Sawmills	710	18,405,850	4,785	3,052,168	6,944,322	13,068,688
36	Soaps and washing compounds	47	8,399,857	1,413	1,820,754	7,585,923	12,887,200
37	Tobacco processing and packing	8	5,523,051	1,459	1,057,755	10,472,145	12,363,689
38	Distilleries	8	22,530,977	1,049	1,295,526	2,916,006	12,180,852
39	Railway rolling-stock	15	19,311,141	3,003	3,585,217	6,216,141	11,617,280
40	Hardware and tools	103	18,919,445	3,932	4,206,181	3,831,213	11,589,304
	Totals, Forty Leading Industries	**6,678**	**1,215,291,962**	**213,624**	**234,445,264**	**670,531,051**	**1,216,436,133**
	Totals, All Industries	**9,753**	**1,588,484,130**	**288,992**	**314,872,843**	**822,884,081**	**1,547,551,931**
	Percentages of forty leading industries to totals of all industries	68·5	76·5	73·9	74·5	81·5	78·6

[1] See footnote 1, Table **13.**

Subsection 4.—The Manufactures of the Prairie Provinces, 1936.

The leading industries of these provinces are those based on their agricultural resources—their grain-growing, cattle-raising, and dairying areas. Next in importance, generally, are industries serving the resident population such as bread and baking, printing and publishing, etc. The extensive railway services require large shops for the maintenance of rolling-stock. The widespread use of motor vehicles and power machinery on farms has given rise to petroleum refineries in each province. The greatly increased production of crude petroleum in Alberta seems likely to lead to further development of the refining industry. Manitoba, as the early commercial centre of the prairies, has had a greater industrial development than either of the other provinces. Its natural resources of accessible water powers, forests, and, more recently, minerals, have given rise to quite a diversification of industrial production.

Considering the three provinces as an economic group, slaughtering and meat packing had the largest gross production in 1936, amounting to $52,500,000, followed by flour milling with $36,700,000, and butter and cheese with $23,200,000. These three industries for the processing of the agricultural products of the provinces accounted for 45 p.c. of their total manufacturing production.

16.—Statistics of the Leading Industries of Manitoba, Saskatchewan, and Alberta, 1936.

	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
		No.	$	No.	$	$	$
	MANITOBA.						
1	Slaughtering and meat packing...	8	8,645,295	1,713	2,184,434	21,188,926	26,699,357
2	Railway rolling-stock............	4	13,878,759	4,475	5,111,843	5,363,231	10,916,608
3	Flour mills......................	41	5,244,412	524	515,865	7,444,391	9,002,161
4	Butter and cheese................	80	5,502,354	1,124	1,430,742	5,547,556	8,449,575
5	Printing and publishing..........	81	3,695,721	1,112	1,584,293	624,805	3,832,154
6	Bread and other bakery products.	136	3,014,512	1,064	944,588	1,625,189	3,291,015
7	Printing and bookbinding........	80	3,878,441	1,157	1,379,435	1,089,763	3,247,108
8	Malt and malt products..........	4	4,288,746	119	203,628	1,902,482	2,827,735
9	Bags, cotton and jute............	5	1,842,579	221	263,137	2,131,057	2,712,695
10	Furnishing goods, men's..........	14	1,276,107	898	668,338	1,600,019	2,542,589
11	Clothing, women's factory........	23	946,886	954	717,543	1,539,183	2,409,306
12	Coffee, tea, and spices............	9	1,533,798	144	163,377	1,824,107	2,385,899
13	Breweries........................	6	2,967,044	335	452,018	604,038	2,308,510
14	Biscuits, confectionery, cocoa, etc.	16	1,785,546	484	364,153	912,312	1,902,327
15	Petroleum products..............	4	497,039	68	74,378	951,886	1,477,159
16	Boxes and bags, paper............	7	1,174,894	260	290,484	776,566	1,353,670
17	Mattresses and springs...........	4	1,184,829	328	346,390	698,238	1,343,870
18	Fur goods........................	34	1,071,869	392	339,301	813,297	1,306,974
19	Aerated and mineral waters......	17	657,809	198	236,034	391,374	1,251,891
20	Paints, pigments, and varnishes..	5	1,716,280	203	234,760	657,943	1,217,132
21	Medicinal and pharmaceutical preparations..................	7	1,025,458	141	143,778	449,858	1,204,838
22	Primary iron and steel...........	4	1,465,671	327	409,900	363,138	1,160,667
23	Coke and gas products...........	3	5,660,947	175	216,409	463,502	1.138,623
24	Sawmills........................	92	1,164,600	438	261,789	374,872	1,049,480
	Totals, Leading Industries[2]....	**684**	**74,119,596**	**16,854**	**18,536,617**	**59,337,733**	**95,031,343**
	Totals, All Industries...........	**1,011**	**118,515,841**	**22,507**	**24,490,299**	**74,374,078**	**122,050,502**
	SASKATCHEWAN.						
1	Flour and feed mills.............	68	15,060,056	550	637,682	11,530,744	15,451,759
2	Slaughtering and meat packing...	6	2,886,188	748	791,987	6,997,579	8,138,764
3	Butter and cheese................	73	3,659,445	871	943,833	5,067,854	7,431,966
4	Petroleum products..............	18	4,853,294	466	606,919	5,246,588	6,638,204
5	Printing and publishing..........	125	2,367,532	852	1,099,554	443,276	2,354,797
6	Breweries........................	7	2,706,558	202	277,472	674,192	1,920,678
7	Bread and other bakery products.	134	1,956,244	559	451,811	973,687	1,883,899
8	Sawmills........................	93	529,276	387	133,092	215,917	515,224
9	Planing mills....................	18	905,871	174	131,067	231,589	440,047
10	Aerated and mineral waters......	18	402,705	85	92,295	158,600	434,722
	Totals, Leading Industries[2]....	**560**	**35,327,169**	**4,894**	**5,165,712**	**31,540,026**	**45,210,060**
	Totals, All Industries...........	**694**	**42,055,557**	**5,782**	**6,013,378**	**35,311,152**	**51,604,510**
	ALBERTA.						
1	Slaughtering and meat packing...	10	6,539,806	1,734	1,893,732	14,129,786	17,681,494
2	Flour mills......................	81	8,320,043	672	740,866	9,332,962	12,261,814
3	Petroleum products..............	12	5,260,904	488	721,058	5,646,597	7,410,882
4	Butter and cheese................	104	4,470,216	868	917,699	5,404,321	7,337,840
5	Railway rolling-stock............	3	6,819,310	1,489	1,625,293	1,255,230	2,985,060
6	Bread and other bakery products.	149	2,124,327	718	655,264	1,427,691	2,716,971
7	Breweries........................	5	4,245,034	227	376,055	926,339	2,671,134
8	Printing and publishing..........	83	2,936,508	802	1,094,899	441,391	2,665,494
9	Sawmills........................	178	1,594,916	920	438,039	538,878	1,404,446
10	All other leading industries[2]......	5	8,590,609	646	652,519	3,730,337	5,943,018
	Totals, Leading Industries.....	**630**	**50,901,673**	**8,564**	**9,115,424**	**42,833,532**	**63,078,153**
	Totals, All Industries...........	**905**	**70,224,578**	**11,756**	**12,328,471**	**47,684,029**	**74,052,010**

[1] See footnote 1 to Table **13**.

[2] Other leading industries, individual statistics of which cannot be given because there are fewer than three establishments in each industry, are: Manitoba, pulp and paper and non-ferrous metal smelting and refining; Saskatchewan, non-ferrous metal smelting and refining; Alberta, sugar refining, wood preservation, and malt and malt products. The statistics of the three industries of Alberta are included under the heading "All other leading industries".

Subsection 5.—The Manufactures of British Columbia,* 1936.

British Columbia was, in 1936, the third most important manufacturing province in the Dominion with 7·2 p.c. of the total production. The rich forests have given the wood industries a pre-eminence in the province. Sawmilling, in 1936, accounted for 21 p.c. of the manufacturing production of the province and for nearly 57 p.c. of the total value of sawmill output in the Dominion. Further emphasising the importance of the forests in the industrial life of the province, the pulp and paper industry ranked third. Second in importance was fish curing and packing, based principally on the estuarial salmon fisheries. British Columbia accounted for 61 p.c. of the total production of this industry in Canada. The varied resources of the province and its position on the Pacific coast have resulted in a good deal of diversification in its manufactures.

---

*Includes Yukon.

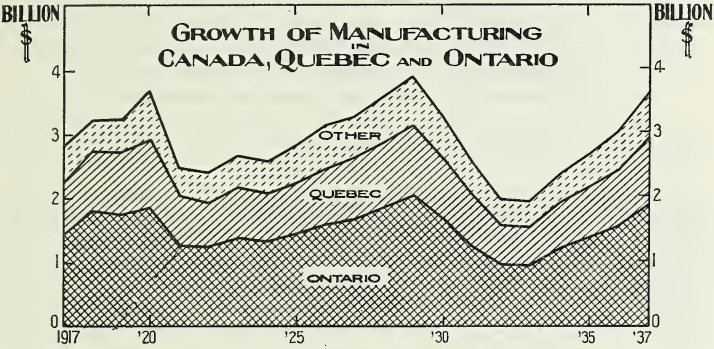
17.—Statistics of the Leading Industries of British Columbia and Yukon, 1936.

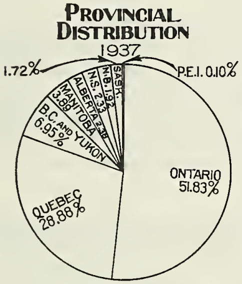
	Industry.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
		No.	$	No.	$	$	$
1	Sawmills	245	37,860,820	12,227	13,350,883	25,348,519	45,546,430
2	Fish curing and packing	91	12,531,513	1,747	1,777,843	9,793,993	16,364,712
3	Pulp and paper	6	46,048,509	2,932	4,083,308	5,528,256	15,396,905
4	Petroleum products	6	5,553,666	408	660,333	7,101,835	9,253,691
5	Slaughtering and meat packing	12	4,538,562	774	912,783	7,404,345	9,037,142
6	Fruit and vegetable preparations	52	4,323,069	1,356	947,884	3,413,775	5,701,689
7	Bread and other bakery products	284	3,831,273	1,629	1,553,943	2,692,629	5,563,089
8	Sheet metal products	14	7,245,667	473	558,960	3,279,109	5,028,004
9	Printing and publishing	73	4,199,507	1,469	2,214,089	840,968	4,862,211
10	Coffee, tea, and spices	10	1,589,403	265	280,404	3,522,225	4,712,162
11	Planing mills	51	3,189,707	1,345	1,183,035	2,415,006	4,697,997
12	Butter and cheese	35	1,692,810	409	469,216	2,663,267	3,943,411
13	Breweries	11	6,621,765	310	474,225	1,192,524	3,825,488
14	Foods, stock and poultry	27	1,525,897	217	238,554	2,002,244	2,652,842
15	Fertilizers	3	10,416,468	391	630,028	1,652,667	2,329,795
16	Coke and gas products	5	12,263,119	292	393,824	607,154	2,268,429
17	Furniture	53	1,486,068	707	646,413	817,128	1,897,531
18	Printing and bookbinding	101	2,051,825	616	725,977	533,963	1,586,103
19	Boxes, wooden	20	1,493,408	527	511,121	849,968	1,571,543
20	Shipbuilding	15	6,453,800	596	766,120	329,704	1,439,849
21	Acids, alkalies, and salts	3	1,109,828	193	313,920	33,663	1,276,853
22	Distilleries	3	4,681,080	235	300,139	507,633	1,229,454
23	Biscuits, confectionery, cocoa, etc.	30	909,261	361	333,628	558,857	1,224,639
24	Paints, pigments, and varnishes	9	1,585,791	179	229,154	563,145	1,222,094
25	Castings and forgings	28	1,648,043	442	518,531	295,175	1,126,221
26	Boxes and bags, paper	9	729,017	185	220,941	522,820	1,050,658
27	Wire and wire goods	8	1,352,373	131	163,982	615,369	1,038,832
28	Miscellaneous paper products	7	868,220	145	150,087	638,269	1,005,187
29	All other leading industries[2]	12	38,926,639	4,164	5,731,368	27,064,017	40,622,419
	Totals, Leading Industries	**1,223**	**226,727,108**	**34,725**	**40,340,693**	**112,788,227**	**197,475,380**
	Totals, All Industries	**1,695**	**250,686,403**	**39,796**	**45,854,374**	**121,362,118**	**216,136,078**
	Percentages of leading industries to totals of all industries	72·2	90·4	87·3	88·0	92·9	91·4

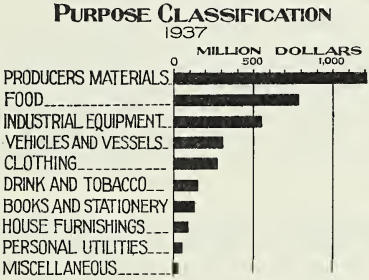
[1] See footnote 1 to Table 13.

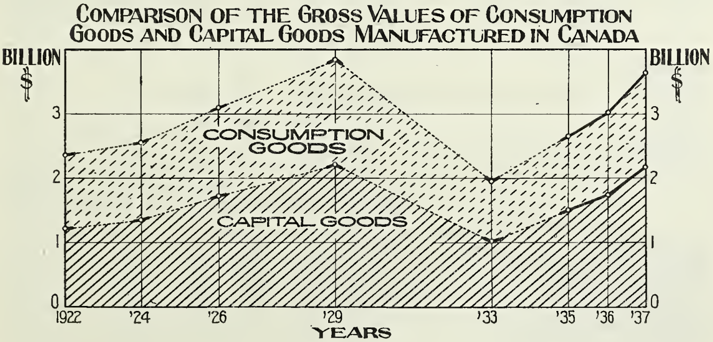
[2] Includes other leading industries, statistics of which cannot be published, because there are fewer than three establishments in each industry. Such industries are: condensed milk, sugar refineries, wood preservation, non-ferrous metal smelting and refining, bridge and structural steel, and explosives, ammunition, and fireworks.

TWENTY YEARS OF CANADIAN MANUFACTURING









Section 4.—Principal Factors in Manufacturing Production.

Subsection 1.—Capital Employed.

The remarkable increase in capital employed in Canadian manufactures from the beginning of the twentieth century denotes rapid growth in industrial operations. From 1900 to 1905 the capital increased from $446,900,000 to $833,900,000, and advanced to $1,958,700,000 in 1915. During this period returns were received from establishments with 5 hands or over, and, while the rise in wholesale prices did not exceed 37 p.c., the capital employed in manufactures increased nearly 340 p.c.

The capital investment in 1936 in all establishments, irrespective of the number of employees, but exclusive of central electric stations, was $3,271,000,000 as compared with $2,334,000,000 in 1917, an increase of 40 p.c. in 19 years, while wholesale prices have declined about 35 p.c. in the same period.

Wood and paper products was the leading group in 1936. Next in importance were the iron and its products and the vegetable products groups. It is interesting to note that in the case of the wood, iron, non-metallic mineral, and chemical groups the capital exceeded the gross value of products, while in the remaining groups the reverse was the case. These remaining groups, however, had relatively high material costs. By a comparison with Table **24**, the non-metallic mineral group had the largest capital per wage-earner and also paid the highest average wage, but this relationship does not hold good in the case of all groups.

The statistics of capital employed in the manufacturing industries are of interest in deducing the proportions of fixed and liquid assets. In 1924, land, buildings, machinery, and tools constituted 59 p.c. of the total capital; in 1929 the proportion was still 59 p.c.; in 1933 it was 66 p.c.; but in 1936 it had declined again to 63 p.c. The fixed assets amounted to $2,062,000,000 in 1936, while current assets, including inventories of raw materials and finished products, bills and accounts receivable, cash, and sundries, were valued at $1,210,000,000. Details by provinces and industrial groups are given in Table **19**.

18.—Distribution of Capital Employed in the Manufacturing Industries of Canada, in Percentages, by Provinces and Industrial Groups, Representative Years 1917-36.

Note.—Figures have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Province or Group.	1917.	1920.	1926.	1929.	1933.	1935.	1936.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Province.							
Prince Edward Island	0·1	0·1	0·1	0·1	0·1	0·1	0·1
Nova Scotia	5·3	4·6	3·3	3·0	2·8	2·7	2·7
New Brunswick	2·6	3·5	2·6	2·3	2·7	2·6	2·5
Quebec	28·4	30·1	30·2	31·1	31·6	31·5	31·5
Ontario	49·6	50·1	50·4	49·6	48·4	48·0	48·5
Manitoba	3·6	3·2	2·7	3·0	3·1	3·6	3·6
Saskatchewan	1·0	0·8	0·8	1·1	1·2	1·2	1·3
Alberta	2·1	1·6	1·8	2·0	2·1	2·1	2·1
British Columbia and Yukon	7·3	6·0	8·1	7·8	8·0	8·2	7·7
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
Industrial Group.							
Vegetable products	12·0	13·7	14·3	14·5	15·9	15·8	16·0
Animal products	8·9	7·6	7·0	6·1	6·2	6·6	6·8
Textiles and textile products	8·2	10·4	9·4	9·0	9·1	9·5	9·7
Wood and paper products	23·0	26·5	28·9	28·8	27·2	27·1	26·8
Iron and its products	29·8	24·8	20·4	20·6	18·8	18·2	18·4
Non-ferrous metal products	3·0	3·7	6·3	7·5	8·1	8·1	8·1
Non-metallic mineral products	6·2	7·4	7·8	7·9	9·0	9·0	8·6
Chemicals and allied products	7·5	4·2	4·2	4·1	4·7	4·6	4·5
Miscellaneous industries	1·4	1·7	1·7	1·5	1·0	1·1	1·1

19.—Forms of Capital Employed in the Manufacturing Industries of Canada, by Provinces and Groups of Industries, 1936, and Totals for Representative Years 1924-35.

NOTE.—Figures have been revised since publication of the 1938 Year Book; see headnote to Table 1, p. 379.

Province or Group.	Establishments.	Fixed Capital.	Working Capital.		Total Capital.
		Land, Buildings, Fixtures, Machinery, Tools, and other Equipment.	Inventory Value of Raw Materials and Finished Products on Hand, Stocks in Process, Fuel, Supplies, etc.	Cash, Bills and Accounts Receivable, Prepaid Expenses, etc.	
	No.	$	$	$	$
Totals, 1924	**20,709**	**1,717,122,081**	**658,360,445**	**519,834,982**	**2,895,317,508**
Totals, 1926	**21,301**	**1,905,620,436**	**707,413,136**	**595,037,625**	**3,208,071,197**
Totals, 1927	**21,501**	**2,043,427,886**	**754,983,995**	**656,413,648**	**3,454,825,529**
Totals, 1929	**22,216**	**2,356,913,335**	**867,689,319**	**780,289,355**	**4,004,892,009**
Totals, 1930	**22,618**	**2,479,437,784**	**837,547,995**	**724,044,696**	**4,041,030,475**
Totals, 1931	**23,083**	**2,343,876,260**	**710,242,778**	**651,582,855**	**3,705,701,893**
Totals, 1932	**23,102**	**2,218,729,234**	**597,939,060**	**563,807,215**	**3,380,475,509**
Totals, 1933	**23,780**	**2,151,091,557**	**573,587,617**	**554,580,664**	**3,279,259,838**
Totals, 1934	**24,209**	**2,109,729,523**	**598,110,478**	**541,508,863**	**3,249,348,864**
Totals, 1935	**24,034**	**2,080,221,792**	**610,814,942**	**525,366,393**	**3,216,403,127**
PROVINCE.					
Prince Edward Island	233	1,500,390	403,596	490,546	2,394,532
Nova Scotia	1,158	59,647,988	16,407,852	11,832,513	87,888,353
New Brunswick	784	58,511,562	12,987,359	9,969,177	81,468,098
Quebec	7,969	678,213,293	189,435,373	161,897,373	1,029,546,039
Ontario	9,753	959,016,420	332,756,305	296,711,405	1,588,484,130
Manitoba	1,011	79,176,137	23,804,517	15,535,187	118,515,841
Saskatchewan	694	21,523,510	10,073,974	10,458,073	42,055,557
Alberta	905	45,389,672	16,454,328	8,380,578	70,224,578
British Columbia and Yukon	1,695	158,631,288	49,448,153	42,606,962	250,686,403
Totals, 1936	**24,202**	**2,061,610,260**	**651,771,457**	**557,881,814**	**3,271,263,531**
INDUSTRIAL GROUP.					
Vegetable products	5,824	265,910,192	148,664,233	109,590,068	524,164,493
Animal products	4,433	125,729,983	57,755,584	38,814,277	222,299,844
Textiles and textile products	1,879	170,593,142	79,832,950	65,846,911	316,273,003
Wood and paper products	8,175	665,902,485	99,774,323	108,915,973	874,592,781
Iron and its products	1,317	359,338,705	121,599,999	119,485,618	600,424,322
Non-ferrous metal products	512	160,515,825	54,880,171	50,926,078	266,322,074
Non-metallic mineral products	803	210,581,667	48,489,570	23,525,298	282,596,535
Chemicals and allied products	745	84,938,489	32,381,501	30,344,543	147,664,533
Miscellaneous industries	514	18,099,772	8,393,126	10,433,048	36,925,946

Subsection 2.—Employment in Manufactures.

The total number of persons engaged in those manufacturing industries of Canada for which statistics were obtained in 1936 was 594,359, as compared with 468,658 in the same industries in 1933 and 666,531 in 1929. The 1936 employees included 104,417 salaried employees, this figure being obtained from the manufacturers at the end of the year, and 489,942 wage-earners, the average number employed as derived from the manufacturers' records of the numbers on the payrolls on the 15th of each of the twelve months. Prior to 1925, the number of wage-earners was computed as the sum of the number recorded each month divided by 12 whether the establishment was operating the 12 months or not. Beginning with the statistics for 1925, in seasonal industries which were in operation only a limited number of months in each year, such as sawmilling, fruit and vegetable canning, etc., the average was computed by dividing the sum of the wage-earners reported on the 15th of each month by the number of months in operation. This change of method increased the apparent number of employees, not only in seasonal industries but also in the groups containing such seasonal industries and in provincial and Dominion totals. Consequently, the change of method had a reducing influence on apparent average wages and on all other averages per wage-earner and per employee. In 1931, however, the old method of computing the average number of wage-earners was again adopted. A change was also made in the compilation of the number of salaried employees. Prior to 1931, owners who were working as ordinary wage-earners, such as small bakers, reported themselves as wage-earners. In 1931, however, all such owners were required to report themselves as salaried employees. In 1931, also, travelling salesmen who were attached to the plant and devoted all or the greater part of their time in selling the products of that plant were included with salaried employees. Prior to this they were not reported at all. These changes, therefore, explain the apparent increase in the number of salaried employees in 1931 as compared with the previous year; actually there was a decrease, this apparent increase being attributable in part to a decrease in the number of wage-earners.

The number of salaried employees and of wage-earners, as thus ascertained, is given for each of the years since 1917, the year of the first annual census of manufacturing production, in Table **20**. Then, taking the percentages of the wage-earners and the total employees in each year to those of 1917, and dividing these percentages into the volume of manufacturing production in each year (see p. 388 for the index of volume), the quotients give tentative conclusions regarding the efficiency of production per wage-earner and per employee in years subsequent to 1917, as compared with that year. These indexes of the efficiency of production are, of course, affected by the changes in the method of computing the number of employees adopted in 1925, and then again in 1931. Inasmuch as the change increased the apparent number of employees between 1925 and 1930, it proportionately decreased the index of the efficiency of production. The table illustrates the development of modern industry which has accomplished a large increase in production with a comparatively small increase in wage-earners, by better organization and the use of improved equipment. Capital invested in manufacturing industries has increased by 40 p.c. from 1917 to 1936, compared with a decrease of 9·5 p.c. in wage-earners, while the horse-power used per wage-earner has increased from about 3 in 1917 to 9 in 1936. The factor of better organization is not susceptible of measurement. However, salaried employees have increased 61 p.c. since 1917, or more nearly in proportion to the growth in production than wage-earners. The result of these developments has been the increase of 65·1 p.c. in the volume of production per wage-earner and a smaller increase of 52·4 p.c. per employee, owing to the increased proportion of salaried employees in the total. The indexes may be considered as supplying satisfactory evidence of a general gain in volume of production per person employed. In this connection it should be remembered, however, that in 1917, owing to the large numbers overseas, many persons of low efficiency were being employed, their inefficiency being concealed at the time by the prevailing inflation of prices; it is possible that the sudden rise in the indexes of efficiency in 1921 and 1922 may be partly accounted for by the elimination of less competent workers in the contraction of industrial operations which occurred at that time. During the recent depression years the reduced volume of production lowered the indexes of efficiency.

20.—Salaried Employees and Wage-Earners in the Manufacturing Industries of Canada, with Volume of Manufacturing Production and Comparative Efficiency of Production, 1917-36.

NOTE.—Figures in this table have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Year.	Salaried Employees.	Wage-Earners.	Total Employees.	Percentages Relative to 1917.		Index Number of Volume of Mf'd. Products.	Indexes of Efficiency of Production.	
				Of Wage-Earners.	Of Total Employees.		Per Wage-Earner.	Per Employee.
	No.	No.	No.	p.c.	p.c.			
1917	64,918	541,605	606,523	100·0	100·0	100·0	100·0	100·0
1918	66,137	536,042	602,179	99·0	99·3	102·0	103·0	102·7
1919	76,473	517,593	594,066	95·6	97·9	98·1	102·6	100·2
1920	78,334	520,559	598,893	96·1	98·7	95·0	98·9	96·3
1921	70,253	375,109	445,362	69·2	73·4	86·1	124·4	117·3
1922	71,586	384,670	456,256	71·0	75·2	96·0	135·4	127·7
1923	73,374	432,829	506,203	79·9	83·5	104·8	131·3	125·5
1924	70,020	417,590	487,610	77·1	80·4	102·9	133·5	128·0
1925[1]	71,275	451,649	522,924	83·4	86·2	112·7	135·1	130·7
1926[1]	75,337	483,824	559,161	89·3	92·2	128·1	143·4	138·9
1927[1]	78,860	516,192	595,052	95·3	98·1	136·5	143·2	139·1
1928[1]	84,147	547,282	631,429	101·0	104·1	148·8	147·3	142·9
1929[1]	88,841	577,690	666,531	106·7	109·9	157·5	147·6	143·3
1930[1]	84,711	529,985	614,696	97·9	101·3	142·8	145·9	141·0
1931[2]	91,491	437,149	528,640	80·7	87·2	124·1	153·8	142·3
1932	87,050	381,783	468,833	70·5	77·3	105·0	148·9	135·8
1933	86,636	382,022	468,658	70·5	77·3	105·1	149·1	136·0
1934	92,095	427,717	519,812	79·0	85·7	123·7	156·6	144·3
1935	97,930	458,734	556,664	84·7	91·8	136·4	161·0	148·6
1936	104,417	489,942	594,359	90·5	98·0	149·4	165·1	152·4

[1] A change in the method of computing the number of wage-earners in the years 1925 to 1930, inclusive, increased the number somewhat over that which the method otherwise used would have given. In 1931, however, the method in force prior to 1925 was re-adopted. The figures for 1931 and later years are, therefore, comparable with those for 1924 and earlier years. [2] The apparent increase in the number of salaried employees in 1931, at a time when the total number of employees decreased, is due to the following changes in method:—(a) Working proprietors, such as bakers, sawmill and feed-mill operators, were classed as salaried employees instead of wage-earners, as formerly had been the case; (b) Travelling salesmen who were attached to the plant and devoted all or the greater part of their time to selling the products of that plant were included with salaried employees. Prior to this they were not reported at all.

Distribution of Employees in 1936.—The percentages, by provinces and industrial groups, of employees on salaries and on wages are shown for 1936 in Table **21**. The actual numbers upon which these percentages are based appear in Table **24**. Interesting comparisons may be made with the distribution of capital appearing in Tables **18** and **19** and with that of values produced shown in Tables **2** and **3**. In 1936, the 24,202 establishments covered, employed 104,417 salaried employees and 489,942 wage-earners, a total of 594,359 persons. Out of every 1,000 persons employed in manufacturing, 176 were classed as salary earners and 824 as wage-earners; the former earned 28·3 p.c. and the latter 71·7 p.c. of the total amount paid out as remuneration for services.

Ontario had a lower percentage of salaried employees and a lower percentage of wage-earners than its proportion of gross production (51·5 p.c.) or of net production (53·2 p.c.). In Quebec, on the other hand, the percentages of both salaried and wage-earning employees were higher than the proportions of gross (28·7 p.c.) and net (29·3 p.c.) production. The percentages of salaries were relatively high in both Ontario and Quebec, as these provinces contain the head offices of many large corporations with their salaried executives. In Ontario the percentage of female salaried employees was higher than that of the male, *i.e.*, it had a larger proportion of females among its salaried employees than the other provinces. The same was true of Quebec with regard to the wage-earners, due, no doubt, to the textile industries of Quebec.

The proportion of salaried employees was relatively high in the wood and paper group, while the proportion of wage-earning employees was high in the textile and the iron groups. The proportion of females to males among both salaried and wage-earning employees was high in the textile group. The vegetable products group also had a high proportion of female wage-earners, while the wood and paper, iron, and non-metallic mineral groups had very low proportions. It is of interest to note that out of every 1,000 wage-earners in the textile industries 541 were females, while in all the other groups 141 were females. The importance of the textile industries in providing employment to females is strikingly illustrated by the fact that out of all female wage-earners engaged in the manufacturing industries of Canada, 50·4 p.c. were found in the textile group.

21.—Percentages of Male and Female Employees on Salaries and Wages and Percentages of Total Salaries and Wages, by Provinces and Groups of Industries, 1936.

NOTE.—For actual figures upon which this table is based, see Table 24.

Province or Group.	Employees on Salaries.			Salaries.	Employees on Wages.			Wages.
	Male.	Female.	Total.		Male.	Female.	Total.	
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
PROVINCE.								
Prince Edward Island	0·2	0·2	0·2	0·1	0·1	0·2	0·2	0·1
Nova Scotia	2·0	1·8	2·0	1·6	3·1	2·0	2·8	2·5
New Brunswick	1·8	1·6	1·7	1·6	2·6	1·7	2·4	2·1
Quebec	31·8	27·8	30·9	30·4	30·4	42·7	33·2	29·5
Ontario	49·5	57·9	51·3	53·1	48·5	46·5	48·1	50·8
Manitoba	4·2	3·5	4·1	3·9	4·0	2·9	3·7	4·0
Saskatchewan	1·9	1·1	1·7	1·3	1·0	0·3	0·8	0·8
Alberta	2·7	1·8	2·5	2·2	2·2	0·9	1·9	2·0
British Columbia and Yukon	5·9	4·3	5·6	5·8	8·1	2·8	6·9	8·2
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
INDUSTRIAL GROUP.								
Vegetable products	17·0	15·2	16·6	16·0	12·8	19·0	14·2	12·9
Animal products	12·5	9·3	11·8	9·5	10·6	10·0	10·5	9·4
Textiles and textile products	10·5	17·0	11·9	12·5	12·4	50·4	20·9	16·7
Wood and paper products	25·4	22·1	24·7	23·7	25·6	8·7	21·8	22·8
Iron and its products	15·2	13·8	14·9	16·5	23·3	2·9	18·7	22·4
Non-ferrous metal products	6·8	7·7	7·0	7·8	6·6	4·0	6·1	7·2
Non-metallic mineral products	4·2	3·6	4·1	4·3	4·5	0·5	3·6	4·3
Chemicals and allied products	6·4	8·6	6·9	7·5	2·6	2·6	2·6	2·8
Miscellaneous industries	2·0	2·7	2·1	2·2	1·6	1·9	1·6	1·5

Monthly Record of Employment in Manufactures.—A monthly record of the number of wage-earners employed in Canadian manufactures, as compiled from the Census of Industry, is given in Table 22 for representative years 1922 to 1936 and by sex for certain of the years. Ordinarily, manufacturing employment in Canada reaches its highest point during the summer months. Some of the seasonal industries, such as canning, are most active then, textile industries are preparing winter goods and industry generally feels the active demand of the agricultural purchasing power resulting from the prospects of the season's harvest. In 1929, however, the rising tide of "good times" was checked about midsummer and then the recession set in during the autumn with the stock market crash. Employment during 1930, 1931, 1932 and the first half of 1933 declined steadily, the monthly employment figures in each case being lower than the corresponding month of the previous year. The peak of employment was reached in June, 1929, when 575,693 wage-earners were on the payrolls. This compared with the peak month in 1933 of 410,954 wage-earners, 440,664 in 1934, 476,961 in 1935, and 511,072 in 1936. In

July, 1933, employment took an upward swing; for the first time since 1929 the number of wage-earners on the payroll was higher than that for the corresponding month of the previous year. The improvement has been generally maintained since then.

22.—Total Numbers of Wage-Earners Employed in the Manufacturing Industries of Canada, by Months and by Sex, for Representative Years 1922-36.

Note.—Figures in this table have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

TOTAL WAGE-EARNERS.

Month.	1922.	1926.	1929.	1933.	1934.	1935.	1936.
January	324,257	417,469	502,644	340,027	377,227	406,437	448,706
February	336,729	430,469	519,423	347,777	394,005	422,089	458,114
March	349,110	444,597	536,866	355,888	407,421	431,375	468,053
April	360,248	457,680	555,711	358,759	418,289	441,289	477,860
May	382,504	478,541	574,905	377,659	439,981	459,239	496,874
June	393,935	491,858	575,693	392,196	444,151	465,724	500,829
July	391,186	494,467	573,554	393,464	432,515	462,567	497,840
August	389,511	489,367	567,022	402,249	435,377	463,092	499,134
September	392,423	490,115	564,796	410,954	440,664	476,961	511,072
October	385,262	486,996	553,338	405,757	434,800	476,715	507,922
November	378,992	467,936	527,213	396,384	424,817	467,502	497,313
December	367,724	449,342	499,893	380,612	409,253	452,139	486,116

WAGE-EARNERS BY SEX.

Month.	1922.		1929.		1933.		1935.		1936.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
January	243,682	80,575	397,459	105,185	257,445	82,582	312,201	94,236	348,703	100,003
February	253,178	83,551	410,865	108.558	260,728	87,049	323,859	98,230	354,513	103,601
March	263,849	85,261	426,713	110,153	267,259	88,629	331,753	99.622	363,250	104,803
April	274,821	85,427	443,569	112,142	271,348	87,411	341,076	100,213	372,777	105,083
May	294,095	88,409	459,783	115,122	285,705	91,954	354,659	104,580	387,636	109,238
June	304,395	89,540	460,294	115,399	296,937	95,259	360,714	105.010	391,998	108,831
July	304,020	87,166	459,051	114,503	300,329	93,135	361,267	101,300	392,594	105,246
August	301,234	88,277	449,721	117,301	302,969	99,280	355,933	107,159	387,892	111,242
September	298,918	93,505	441,510	123,286	304,908	106,046	359,940	117,021	389.444	121,628
October	291,973	93,289	432.576	120,762	301,315	104,442	362,203	114,512	388,681	119,241
November	286,511	92,481	412,114	115,099	294,945	101,439	355,846	111,656	381,687	115,626
December	277,854	89,870	391,903	107,990	285.690	94,922	346,939	105,200	376,457	109,659

Hours Worked by Wage-Earners.—The number of wage-earners working specified numbers of hours per week in the month of highest employment in 1932 to 1936 and in detail by provinces, industrial groups and in the forty leading industries for 1936 is shown in Table **23**. An explanation should be made of the term "month of highest employment" as used in connection with this table. Each firm is required to report the number of hours per week worked by its wage-earners during the month in which the greatest number were employed. It therefore happens that, in the case of one firm, the month of highest employment might be May, while in that of another firm October might be the month of highest employment. The month of highest employment as shown in the following table, therefore, does not refer to any particular month but represents the summation of the different months of highest employment as reported by all firms. For a given industry, however, the month of highest employment is of more significance, as in this case it coincides for a great number of the firms engaged in the same industry.

23.—Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1932 to 1935 and in Detail by Provinces, Groups, and the Forty Leading Industries, 1936.

Note.—These are the regular hours worked per week and do not, therefore, include overtime. Totals for years prior to 1936 have been revised since publication of the 1938 Year Book.

Year, Province or Group.	40 Hours or Less.	41-43 Hours.	44 Hours.	45-47 Hours.	48 Hours.	49-50 Hours.	51-53 Hours.	54 Hours.	55 Hours.	56-59 Hours.	60 Hours or Over.	Total Number of Wage-Earners.	Average Hours Worked per Week.
Totals,[1] 1932	**78,223**	**9,593**	**65,063**	**31,193**	**81,894**	**67,823**	**14,438**	**30,098**	**39,817**	**18,131**	**62,296**	**498,569**	**48·9**
Totals,[1] 1933	**82,896**	**9,571**	**63,598**	**33,033**	**75,558**	**66,310**	**15,764**	**28,770**	**44,465**	**14,150**	**59,158**	**493,273**	**48·7**
Totals,[1] 1934	**70,736**	**9,814**	**69,217**	**38,805**	**95,669**	**71,997**	**16,562**	**24,520**	**46,437**	**21,938**	**64,659**	**530,354**	**49·2**
Totals,[1] 1935	**72,528**	**11,448**	**78,564**	**44,672**	**130,830**	**62,328**	**19,100**	**25,935**	**42,261**	**21,068**	**59,712**	**568,446**	**48·7**
PROVINCE.													
Prince Edward Island	150	43	172	39	574	40	41	131	81	38	528	1,837	52·3
Nova Scotia	1,330	211	926	1,589	3,882	1,266	640	2,313	685	2,508	3,630	18,980	52·1
New Brunswick	1,776	222	453	543	3,938	2,072	542	1,865	166	1,496	4,083	17,156	52·3
Quebec	21,749	3,693	22,492	13,226	38,802	20,495	7,469	6,467	27,405	7,843	27,810	197,451	50·1
Ontario	34,274	5,551	40,850	32,552	61,384	41,633	8,165	13,823	14,626	10,332	23,709	286,899	48·3
Manitoba	5,742	1,208	5,039	1,078	3,761	1,149	475	507	231	381	1,528	21,099	44·9
Saskatchewan	531	96	631	120	1,383	213	274	365	28	120	964	4,725	50·3
Alberta	2,155	185	1,763	485	3,306	447	182	1,402	47	122	1,349	11,443	47·7
British Columbia and Yukon	7,517	611	7,876	1,627	21,470	425	499	2,839	108	529	621	44,122	45·7
Totals,[1] 1936	**75,224**	**11,820**	**80,202**	**51,259**	**138,500**	**67,740**	**18,287**	**29,712**	**43,377**	**23,369**	**64,222**	**603,712**	**48·7**
INDUSTRIAL GROUP.													
Vegetable products	13,325	2,594	8,119	9,395	15,347	10,536	3,571	10,425	4,958	6,136	15,898	100,304	50·2
Animal products[1]	4,837	821	4,739	2,913	12,620	8,026	2,803	3,909	4,064	1,844	5,548	52,124	49·8
Textiles and textile products	8,039	2,317	22,825	7,817	17,660	22,217	6,190	1,473	23,161	2,450	2,560	116,709	48·6
Wood and paper products	6,969	2,123	13,819	6,764	51,457	8,031	2,263	7,963	3,998	6,726	31,879	141,992	51·7
Iron and its products	27,026	2,085	17,062	14,650	19,862	12,076	2,133	3,622	4,623	3,423	4,217	110,779	45·5
Non-ferrous metal products	6,470	142	5,523	5,896	10,597	2,473	439	342	1,104	880	623	34,489	45·5
Non-metallic mineral products	4,651	892	2,380	688	5,793	1,590	297	1,258	739	1,137	2,592	22,017	47·7
Chemicals and allied products	3,245	725	3,128	1,987	3,336	1,011	359	287	201	478	481	15,238	45·1
Miscellaneous industries	662	121	2,607	1,149	1,828	1,780	232	433	529	295	424	10,060	47·8

---

[1] Exclusive of dairy factories.

23.—Wage-Earners Working Specified Numbers of Hours in the Month of Highest Employment from 1932 to 1935 and in Detail by Provinces, Groups, and the Forty Leading Industries, 1936—concluded.

	Industry.	40 Hours or Less.	41-43 Hours.	44 Hours.	45-47 Hours.	48 Hours.	49-50 Hours.	51-53 Hours.	54 Hours.	55 Hours.	56-59 Hours.	60 Hours or Over.	Total Number of Wage-Earners.	Average Hours Worked per Week.
1	Non-ferrous metal smelting	2,954	Nil	469	713	4,997	1	5	185	Nil	498	64	9,886	44·5
2	Pulp and paper	1,706	439	430	520	17,571	1,143	888	2,144	512	921	3,207	29,481	49·9
3	Slaughtering and meat packing	504	289	371	485	3,349	1,586	625	1,081	1,008	437	1,071	10,806	51·7
4	Flour and feed mills	239	13	573	17	1,597	39	30	333	349	144	1,094	4,428	52·3
5	Butter and cheese	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]	[1]
6	Automobiles	7,330	200	1,154	3,842	475	6	20	5	Nil	23	33	13,088	39·8
7	Petroleum products	3,208	50	155	44	722	41	19	42	9	23	111	4,424	38·9
8	Sawmills	433	81	634	238	14,248	699	134	3,016	554	3,443	24,010	47,490	57·6
9	Electrical apparatus and supplies	2,128	89	2,861	3,844	4,188	1,136	119	82	682	178	114	15,421	45·6
10	Cotton yarn and cloth	176	143	41	407	3,044	3,564	249	Nil	10,803	85	1,107	19,619	53·0
11	Bread and other bakery products	743	134	628	206	3,476	1,246	908	4,840	994	1,616	2,910	17,701	53·3
12	Rubber goods, including footwear	2,163	532	274	1,665	981	1,393	775	1,570	449	773	859	11,434	48·3
13	Printing and publishing	1,292	606	1,788	1,266	4,373	286	172	149	29	71	49	10,081	45·4
14	Railway rolling-stock	13,803	191	2,567	2,590	469	272	66	100	59	63	140	20,320	38·6
15	Clothing, factory, women's	3,422	980	7,461	1,672	5,241	1,126	173	37	77	96	79	20,364	44·2
16	Hosiery and knitted goods	763	194	1,467	2,277	2,395	6,047	1,371	140	4,291	192	183	19,320	49·5
17	Fruit and vegetable preparations	6,493	616	642	3,046	1,466	1,142	745	975	1,250	2,637	7,783	26,795	51·0
18	Primary iron and steel	588	291	282	959	6,036	309	257	204	309	1,228	1,092	11,555	50·0
19	Biscuits, confectionery, cocoa, etc	660	376	1,159	1,807	2,100	1,645	266	1,193	999	147	322	10,674	48·5
20	Breweries	278	38	460	259	340	1,122	148	90	211	234	670	3,850	51·0
21	Machinery	527	60	2,309	966	1,760	2,716	150	68	293	261	278	9,388	47·6
22	Clothing, factory, men's	93	266	7,233	218	1,259	486	97	65	Nil	2	Nil	9,719	44·8
23	Sugar refineries	581	26	13	27	1,347	78	141	93	11	98	1,034	3,449	51·5
24	Tobacco, cigars, and cigarettes	712	513	955	271	571	2,587	238	139	207	85	77	6,355	46·8
25	Sheet metal products	258	56	2,733	601	1,752	657	190	113	614	153	202	7,329	47·4
26	Coke and gas products	119	60	331	149	1,398	203	60	108	19	366	235	3,048	49·7
27	Boots and shoes, leather	1,241	249	1,394	1,325	3,612	3,513	982	563	2,068	790	883	16,620	49·4
28	Printing and bookbinding	707	243	3,313	970	5,331	384	25	14	7	3	16	11,013	45·8
29	Automobile supplies	576	275	622	915	737	1,943	249	808	588	477	303	7,493	48·5
30	Castings and forgings	943	449	1,841	2,121	1,420	914	289	1,062	667	557	469	10,732	48·0
31	Silk and artificial silk	32	72	187	175	304	2,835	2,148	13	3,019	943	204	9,932	52·5
32	Fish canning and curing	985	95	116	133	2,949	214	248	1,532	148	318	3,053	9,791	53·3
33	Coffee, tea, and spices	42	87	483	395	406	74	26	18	1	17	1	1,550	45·9
34	Boxes and bags, paper	150	118	845	829	1,395	1,428	223	135	337	100	203	5,763	46·2
35	Brass and copper products	1,112	24	794	265	397	772	136	62	167	95	319	4,143	45·9
36	Furnishing goods, men's	543	150	2,515	1,434	1,346	2,061	311	267	541	75	10	9,253	46·9
37	Leather tanneries	28	12	473	144	653	1,853	232	415	215	87	285	4,397	50·4
38	Paints and varnishes	394	14	475	305	400	250	32	5	14	16	46	1.951	44·8
39	Medicinal preparations, etc	252	95	827	930	279	165	23	3	Nil	3	10	2,587	44·7
40	Furniture	477	164	1,891	1,295	1,347	1,669	283	668	634	495	1,027	9,950	49·7
	Totals, Forty Leading Industries	**58,655**	**8,290**	**52,766**	**39,325**	**105,731**	**47,605**	**13,053**	**22,337**	**32,135**	**17,750**	**53,553**	**451,200**	**49·0**
	Totals, All Industries	**75,224**	**11,820**	**80,202**	**51,259**	**138,500**	**67,740**	**18,287**	**29,712**	**43,377**	**23,369**	**64,222**	**603,712**	**48·7**

[1] Figures not available.

The number of hours worked per week is affected both by business conditions and by changes due to government legislation and union demands. In times of depression the average number of hours per week is reduced, due to the policy of some employers of spreading the available work over as many employees as possible. With the return of better times the number of hours worked by each employee is naturally increased. This increase is, however, offset by the reduction in hours through legislative enactments and union agreements. The period of five years, for which the figures of Table **23** are available, is not long enough to establish a definite trend in the average hours worked.

For Canada as a whole, 36 p.c. of the wage-earners worked under 48 hours in 1936, 23 p.c. worked 48 hours, 19 p.c. worked between 49 and 54 hours, while 22 p.c. worked 55 hours or over.

Subsection 3.—Wages and Salaries in Canadian Manufacturing Industries.

The total salaries and wages disbursed by manufacturers in 1936 was $612,071,434 paid to 594,359 workers, compared with $777,291,217 paid to 666,531 persons in 1929 and $497,801,844 paid to 606,523 persons in 1917. Of the 1936 aggregate, $173,198,057 or 28·3 p.c. was paid to 104,417 salaried employees who constituted 17·6 p.c. of the total number, and $438,873,377 or 71·7 p.c. was paid in wages to 489,942 wage-earners, who formed 82·4 p.c. of the aggregate number of employees.

The average salary paid in the manufacturing industries during 1936 was $1,659, compared with $2,007 in 1930 and $1,315 in 1917, while the average wage in 1936 was $896, compared with $777 in 1933, $1,042 in 1929 and $762 in 1917. Thus during the nineteen years since 1917, average salaries have increased by 26 p.c., while average wages have increased by only 18 p.c. (See Table **25**.)

Average Earnings, by Provinces and Industrial Groups.—In 1936, British Columbia showed the highest average salary of $1,722, followed by Ontario with $1,718, Quebec, $1,631, and Manitoba with $1,579. The head offices of many large corporations being located in Montreal, Toronto, Vancouver, and Winnipeg tends to raise the average salaries in the provinces in which these cities are situated. In the other provinces the averages were smaller, the lowest being in Saskatchewan. No regional tendency is observable in average salaries as shown by Table **24**.

British Columbia, with average wages paid of $1,055 per annum, was the highest in 1936, being $159 higher than the general average. In the western provinces, average wages are usually higher, due to an unusually small proportion of women workers. In the four provinces situated to the east, average wages in manufacturing were lower than the mean for the Dominion, while from Ontario westward the opposite was the case. The seasonal nature of some of the leading industries, notably fish preserving and lumbering, tends to reduce the mean wage in the Maritime Provinces and Quebec, while, in addition to this, Quebec also has a larger proportion of female wage-earners (employed chiefly in the textile, food, and tobacco industries), than any other province except Prince Edward Island.

The highest average salary, *viz.*, $1,866, was reported by the non-ferrous metal products group, while the animal products group, with an average salary of $1,338 in 1936, was the lowest. In wages paid, the iron and the non-metallic groups were highest with an average of $1,070, there being few female wage-earners in these groups. The textile industries, on the other hand, had the lowest average wage of $715, due to the fact that in this group about 54 p.c. of the wage-earners were females. As is stated at the top of p. 421, of all the female wage-earners in the manufactures of Canada, over 50 p.c. found employment in the textile industries.

24.—Employees on Salaries and Wages in the Manufacturing Industries, 1936, by Sex, and Average Salaries and Wages, 1935 and 1936, by Provinces and Groups.

Province or Group.	Employees on Salaries.			Average Salaries.		Employees on Wages.			Average Wages.	
	Male.	Female.	Total.	1936.	1935.[1]	Male.	Female.	Total.	1936.	1935.[1]
	No.	No.	No.	$	$	No.	No.	No.	$	$
PROVINCE.										
Prince Edward Island....	195	42	237	796	801	529	230	759	480	456
Nova Scotia............	1,671	414	2,085	1,349	1,341	11,603	2,256	13,859	792	785
New Brunswick..........	1,459	372	1,831	1,534	1,514	10,008	1,871	11,879	762	724
Quebec..................	25,852	6,404	32,256	1,631	1,631	115,619	47,001	162,620	798	768
Ontario..................	40,261	13,320	53,581	1,718	1,696	184,307	51,104	235,411	947	929
Manitoba................	3,445	803	4,248	1,579	1,559	15,075	3,184	18,259	974	937
Saskatchewan............	1,524	262	1,786	1,282	1,246	3,719	277	3,996	932	883
Alberta..................	2,169	410	2,579	1,448	1,413	8,212	965	9,177	937	908
British Columbia and Yukon................	4,833	981	5,814	1,722	1,626	30,905	3,077	33,982	1,055	1,002
Totals...........	**81,409**	**23,008**	**104,417**	**1,659**	**1,638**	**379,977**	**109,965**	**489,942**	**896**	**870**
INDUSTRIAL GROUP.										
Vegetable products.......	13,865	3,500	17,365	1,594	1,566	48,789	20,917	69,706	814	785
Animal products..........	10,191	2,132	12,323	1,338	1,400	40,318	10,968	51,286	806	794
Textiles and textile products..................	8,503	3,914	12,417	1,748	1,673	47,082	55,467	102,549	715	699
Wood and paper products	20,688	5,084	25,772	1,593	1,570	97,078	9,524	106,602	940	903
Iron and its products.....	12,372	3,178	15,550	1,831	1,802	88,444	3,209	91,653	1,070	1,047
Non-ferrous metal products..................	5,494	1,773	7,267	1,866	1,838	25,230	4,438	29,668	1,063	1,038
Non-metallic mineral products..................	3,454	838	4,292	1,744	1,679	17,110	572	17,682	1,070	1,068
Chemicals and allied products..................	5,201	1,975	7,176	1,816	1,796	9,927	2,807	12,734	958	943
Miscellaneous industries..	1,641	614	2,255	1,647	1,587	5,999	2,063	8,062	813	767

---

[1] Revised since publication of the 1938 Year Book; see headnote to Table 1, p. 379.

Average Earnings in the Forty Leading Industries.—Table 25 shows employees by sex and the average salaries and wages paid in the forty leading industries during 1936, together with average salaries and wages paid in 1935. The rank of each industry is based on the aggregate salaries and wages paid.

In only nine industries did the average salaries exceed $2,000; in six they ranged from $1,800 to $2,000; in sixteen they ranged from $1,500 to $1,800; while in the remaining nine they were below $1,500. The lowest salaries were reported by the sawmilling, butter and cheese, and bread and other bakery products industries which include a large proportion of small establishments.

The highest wages, those above $1,200, were paid in six industries—non-ferrous metal smelting and refining, $1,330; printing and publishing, $1,316; petroleum products, $1,302; coke and gas products, $1,298; automobiles, $1,286; and pulp and paper, $1,201—in all of which the proportion of skilled workers is probably high. In seven other industries average wages ranged from $1,000 to $1,200. In most of these industries the proportion of women workers is low. In thirteen other industries average wages ranged between $800 and $1,000, while in the remaining fourteen they were below $800. This last group includes seasonal industries, such as fruit and vegetable canning, fish curing and packing, and industries which contain a large number of small units in which the work is intermittent, such as feed mills. Other industries with low average wages were: textiles, tobacco, and boots and shoes, in which the proportion of female wage-earners is high, the number in several of these industries being greater than those of the males.

25.—Statistics of Salaries and Wages Paid in the Forty Leading Industries, 1936, together with Comparative Figures of Average Salaries and Wages Paid in 1935, and Totals and Averages Paid in Previous Representative Years.

NOTE.—Industries ranked according to the aggregate salaries and wages paid.

	Industry.	Salaries.					Wages.				
		Salaried Employees.		Total Salaries.	Average Salaries.		Wage-Earners.		Total Wages.	Average Wages.	
		Male.	Female.		1936.	1935.[1]	Male.	Female.		1936.	1935.[1]
		No.	No.	$	$	$	No.	No.	$	$	$
1	Pulp and paper	2,994	494	8,151,012	2,337	2,379	25,873	693	31,912,840	1,201	1,143
2	Printing and publishing	6,074	2,027	11,828,058	1,460	1,473	8,065	1,211	12,207,661	1,316	1,275
3	Railway rolling-stock	1,282	70	2,705,829	2,001	1,952	17,255	26	19,455,448	1,126	1,040
4	Sawmills	2,510	207	2,598,318	956	800	25,884	185	18,758,720	720	675
5	Electrical apparatus	3,205	1,171	7,803,954	1,783	1,782	9,381	3,280	11,697,928	924	906
6	Automobiles	1,508	474	4,080,484	2,059	2,097	10,648	303	14,083,558	1,286	1,321
7	Bread, bakery products	2,193	607	2,906,890	1,038	1,015	14,619	2,179	14,796,682	881	826
8	Clothing, factory, women's	1,662	948	4,062,438	1,556	1,520	4,587	11,727	11,193,287	686	698
9	Hosiery, knitted goods	955	630	2,914,978	1,839	1,808	6,555	11,289	12,205,299	684	678
10	Butter and cheese	4,394	766	4,748,886	920	978	9,937	448	10,023,364	965	929
11	Printing and bookbinding	2,691	738	5,437,417	1,586	1,567	6,873	2,375	9,072,069	981	957
12	Non-ferrous metal smelting	752	111	2,176,110	2,522	2,199	9,152	–	12,169,940	1,330	1,327
13	Cotton yarn and cloth	422	142	1,390,549	2,466	2,052	11,265	6,081	12,827,682	740	686
14	Slaughtering and meat packing	2,164	346	4,358,346	1,736	1,726	8,249	1,017	9,563,064	1,032	998
15	Primary iron and steel	782	175	2,180,091	2,278	1,735	10,142	39	11,650,286	1,144	1,247
16	Machinery	1,919	540	4,130,452	1,680	1,707	7,613	205	8,174,970	1,046	1,010
17	Rubber goods, including footwear	1,352	445	3,115,782	1,734	1,718	7,115	2,969	8,838,234	876	867
18	Boots and shoes, leather	1,198	429	2,644,644	1,625	1,640	8,907	5,427	8,977,358	626	642
19	Castings and forgings	1,054	297	2,452,180	1,815	1,781	8,920	120	8,773,758	971	908
20	Clothing, factory, men's	1,340	401	2,548,648	1,464	1,390	4,499	4,338	7,707,097	872	877
21	Biscuits, confectionery, cocoa, etc	1,956	537	4,193,891	1,682	1,707	3,875	4,833	5,907,384	678	664
22	Silk and artificial silk	668	353	2,011,144	1,970	1,830	5,687	3,481	6,866,229	749	731
23	Furniture	1,125	253	1,962,364	1,424	1,357	7,980	319	6,149,513	741	688
24	Sheet metal products	1,191	298	2,361,387	1,586	1,640	5,228	765	5,580,803	931	887
25	Automobile supplies	598	251	1,517,062	1,787	1,784	5,385	608	6,259,664	1,044	1,031
26	Petroleum products	823	146	2,038,360	2,104	2,108	4,041	9	5,271,595	1,302	1,323
27	Tobacco, cigars, etc	1,611	390	3,554,031	1,776	1,579	2,008	3,584	3,653,706	653	630
28	Breweries	1,006	123	2,379,205	2,107	2,173	3,439	36	4,138,599	1,191	1,138
29	Furnishing goods, men's	750	354	1,892,861	1,715	1,656	1,251	7,055	4,471,119	538	525
30	Planing mills	1,197	193	1,687,679	1,214	1,171	6,223	31	4,549,549	727	693
31	Fruit and vegetable preparations	812	285	1,563,870	1,426	1,446	3,844	4,317	4,502,891	552	525
32	Agricultural implements	692	201	1,445,633	1,619	1,594	4,559	56	4,595,987	996	962
33	Hardware and tools	578	252	1,539,070	1,854	1,775	4,125	718	4,363,083	901	870
34	Boxes and bags, paper	754	267	2,005,832	1,965	2,054	2,666	2,215	3,756,166	770	751
35	Coke and gas products	958	315	2,023,881	1,590	1,559	2,838	5	3,690,602	1,298	1,282
36	Flour and feed mills	1,533	184	2,143,380	1,248	1,197	3,809	159	3,399,565	857	829
37	Woollen cloth	374	131	1,020,791	2,021	2,018	3,587	2,360	4,372,159	735	709
38	Brass and copper	789	183	1,669,668	1,718	1,752	3,369	255	3,623,789	1,000	923
39	Medicinal preparations	1,074	562	2,990,124	1,828	1,830	1,010	1,211	1,807,334	814	807
40	Heating and cooking apparatus	521	173	1,171,047	1,687	[2]	3,724	37	3,466,127	922	[1]
	Totals, Forty Leading Industries	**59,461**	**16,469**	**123,406,346**	**1,625**	–	**294,187**	**85,966**	**344,515,109**	**906**	–
	Grand Totals, All Industries—										
	1936	**81,409**	**23,008**	**173,198,057**	**1,659**		**379,977**	**109,965**	**438,873,377**	**896**	
	1935	**76,213**	**21,717**	**160,455,080**	**1,638**		**353,790**	**104,944**	**399,012,697**	**870**	
	1934	**71,963**	**20,132**	**148,760,126**	**1,615**		**326,598**	**101,119**	**355,090,929**	**830**	
	1933	**67,875**	**18,761**	**139,317,946**	**1,608**		**287,266**	**94,756**	**296,929,878**	**777**	
	1932	**68,264**	**18,786**	**151,355,790**	**1,739**		**288,817**	**92,966**	**322,245,926**	**844**	
	1931	**71,198**	**20,293**	**172,289,095**	**1,883**		**337,636**	**99,513**	**415,277,895**	**950**	
	1930[3]	**64,161**	**20,550**	**169,992,216**	**2,007**		**416,790**	**113,195**	**527,563,162**	**995**	
	1929[3]	**67,731**	**21,110**	**175,553,710**	**1,976**		**454,768**	**122,922**	**601,737,507**	**1,042**	
	1926[3]	**58,245**	**17,092**	**142,353,900**	**1,890**		**374,244**	**109,580**	**483,328,342**	**999**	
	1924	**54,379**	**15,641**	**130,344,822**	**1,857**		**322,719**	**94,871**	**404,122,853**	**968**	
	1922	**71,586**		**129,836,831**	**1,814**		**384,670**		**359,560,399**	**935**	
	1920	**78,334**		**141,857,361**	**1,811**		**520,559**		**575,656,515**	**1,106**	
	1917	**64,918**		**85,353,667**	**1,315**		**541,605**		**412,448,177**	**762**	

---

[1] Revised since publication of the 1938 Year Book; see headnote to Table 1, p. 379. [2] Included with "Castings and forgings" in 1935. [3] See headnote to Table 26, p. 428.

Real Earnings of Employees in Recent Years.—When the index number representing the average yearly wages, with 1917 as a base, is divided by the index number of the cost of living, converted to the same base, it is seen that real wages advanced by 24·6 p.c. between 1917 and 1936. The details of the computation are given in Table **26**. There was little change in real wages during the three years 1917 to 1920, when prices were rising rapidly. During the following two years, 1921 and 1922, when prices dropped rapidly, real wages increased by 5 p.c. From then until 1931 there was a definite and almost continuous upward trend. In 1931 real wages reached 119·1 and then declined to 112·7 in 1933 and rose again to 124·6 in 1936, the highest on record.

26.—Average Yearly Earnings, and Index Numbers of Earnings, Cost of Living, and Real Wages of Wage-Earners, in Manufacturing Industries, 1917-36.

Note.—The averages of wage-earners and earnings for the years 1931 to 1936 are strictly comparable with those for the years up to 1925 but not with those for the intervening years. The figures for the latest years—as for the earliest—represent the earnings for complete man-years of work, with no allowance for periods of unemployment. The difference amounts only to about 3 or 4 p.c. in the total figures and affects chiefly the seasonal industries. (See footnote 1 to Table **4**.) Figures have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Year.	Amount of Wages Paid.	Average Number of Wage-Earners.	Average Yearly Earnings.	Index Numbers.		
				Average Yearly Earnings.	Cost of Living.	Real Value of Average Yearly Earnings.
	$	No.	$			
1917	412,448,177	541,605	762	100·0	100·0	100·0
1918	471,396,933	536,042	879	115·4	113·8	101·4
1919	486,192,367	517,593	939	123·2	125·2	98·4
1920	575.656,515	520,559	1,106	145·2	145·1	100·1
1921	373,456,383	375,109	996	130·7	127·6	102·4
1922	359,560,399	384,670	935	122·7	116·8	105·1
1923	413,515,032	432,829	955	125·3	116·8	107·3
1924	404,122,853	417,590	968	127·0	114·5	110·9
1925[1]	436,534,944	451,649	967	126·9	116·0	109·4
1926[1]	483,328,342	483,824	999	131·1	116·8	112·2
1927[1]	511,285.921	516,192	990	129·9	115·0	113·0
1928[1]	558,568,627	547,282	1,021	134·0	115·5	116·0
1929[1]	601,737,507	577,690	1,042	136·7	116·7	117·1
1930[1]	527,563,162	529,985	995	130·6	115·9	112·7
1931	415,277,895	437,149	950	124·7	104·7	119·1
1932	322,245,926	381,783	844	110·8	95·0	116·6
1933	296.929,878	382,022	777	102·0	90·5	112·7
1934	355,090,929	427,717	830	108·9	91·8	118·6
1935	399,012,697	458,734	870	114·2	92·4	123·6
1936	438,873,377	489,942	896	117·6	94·4	124·6

[1] See headnote.

Percentages of Wages and Salaries to Net Value of Products.—Table **27** shows the relation between wages and salaries paid by manufacturers and the total net value of production. Figures of gross production are often used in such calculations, but the values out of which the wages of employees must come in the long run are the values added to the raw materials while they are in the factory. Such added values constitute the real production of the manufacturing plant and are alone available for payment of wages and salaries, of interest, rent and taxes, repairs, and all other overhead charges that ordinarily must be met. The percentage of salaries was highest in the years 1931 to 1936. These were years in which manufacturing production was curtailed and it is probable that, salaried employees being a part of the organization of an industry rather than of its productive force, salaries were an abnormally high percentage of the lower levels of production then prevailing. The percentage declined steadily with the increasing manufacturing production maintained during the period 1924 to 1929, while from 1931 to 1936, due to decreased industrial activity, the percentage of salaries to value added was abnormally high. It should be borne in mind, however, that salaried employees increased 49 p.c. during the period 1924-36 while wage-earners increased but 17·2 p.c. The percentage of wages has fluctuated much less than that of salaries. The number of wage-earning employees may be more readily adjusted to the activity of the industry and wage levels likewise more readily adjusted to the price levels of the products. The percentage of wages to the values added in manufacture was thus only 3·6 p.c. lower in 1936 than in 1924. The percentage was highest in 1920, when, in the post-war inflation, average wages were highest and the efficiency of production lowest (Table **20**).

In previous reports on manufactures the percentage of wages and salaries paid to the value added by manufacture was carried back to 1917. Under the new method of calculating the value added, whereby the cost of materials plus fuel and electricity is deducted from gross values, it is possible to go back to 1924 only.

27.—Percentages of Wages and Salaries Paid to the Total Net Values of Manufacturing Production, 1924-36.

NOTE.—Figures in this table have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Year.	Value Added by Processes of Manufacture.[1]	Salaries Paid.	Wages Paid.	Percentage—		
				of Salaries to Value Added.	of Wages to Value Added.	of Total Salaries and Wages to Value Added
	$	$	$	p.c.	p.c.	p.c.
1924	1,075,458,459	130,344,822	404,122,853	12·1	37·6	49·7
1925	1,167,936,726	133,409,498	436,534,944	11·4	37·4	48·8
1926	1,305,168,549	142,353,900	483,328,342	10·9	37·0	47·9
1927	1,427,649,292	151,419,411	511,285,921	10·6	35·8	46·4
1928	1,597,887,676	162,903,007	558,568,627	10·2	35·0	45·2
1929	1,755,386,937	175,553,710	601,737,507	10·0	34·3	44·3
1930	1,522,737,125	169,992,216	527,563,162	11·2	34·6	45·8
1931	1,252,017,248	172,289,095	415,277,895	13·8	33·2	47·0
1932	955,960,724	151,355,790	322,245,926	15·8	33·7	49·5
1933	919,671,181	139,317,946	296,929,878	15·1	32·3	47·4
1934	1,087,301,742	148,760,126	355,090.929	13·7	32·7	46·4
1935	1,153,485,104	160,455,080	399,012,697	13·9	34·6	48·5
1936	1,289,592,672	173,198,057	438,873,377	13·4	34·0	47·4

[1] Equivalent to "net value of products"; see footnote 1, Table **1**, p. 379.

Subsection 4.—Size of Manufacturing Establishments.

A modern characteristic of industry in all industrial countries has been the increase in the size of the typical manufacturing establishment. The full utilization of highly specialized machinery necessitates large-scale production, while the improvements in transportation have widened the market.

The size of the manufacturing establishment is generally measured either by the number of employees or by the value of product, but each of these methods has its limitations. The former takes no account of the differences in capital equipment at different times or in various industries and obviously the increased use of machinery, as in the flour-milling industry, may lead to increased production concurrently with a decrease in the number of employees. The latter measure has to be adjusted for changes in the price level; and, as between industries, it makes those in which the cost of raw materials is relatively high appear to operate on a larger scale. Both measures are subject to two limitations: firstly, they depend on the fluctuation of business activity and the demand of the consumer; secondly, over any lengthy period of time there is the difficulty of comparability resulting from changes in the method of the census.

Size as Measured by Gross Value of Products.—While in 1922 the 420 establishments each producing over $1,000,000 had an aggregate value of products of $1,268,056,129 or 51 p.c. of the total production of all manufacturing industries, the 719 establishments producing over $1,000,000 each in 1929 had an aggregate value of products of $2,516,064,954, or 62 p.c. of the grand total for all manufacturing establishments—a very significant change in the short period of eight years. In 1931, however, the number of plants with a production of over $1,000,000 dropped again to 482, their output being valued at $1,451,658,954 or 53 p.c., of the total. Due to the elimination of central electric stations, the figures since 1932 are not directly comparable with those for 1929 or 1922.

28.—Manufacturing Establishments Grouped According to Gross Values of Products, with Total and Average Values of Products in each Class, for Canada, 1922, 1929, 1935, and 1936.

Group of Gross Values.	1922.[1]			1929.[1]		
	Establishments.	Total Production.	Average Production.	Establishments.	Total Production.	Average Production.
	No.	$	$	No.	$	$
Under $25,000	14,978	114,205,770	7,625	14,024	106,735,470	7,611
$ 25,000 but under $ 50,000	2,401	85,075,807	35,433	2,802	99,529,725	35,521
50,000 " 100,000	1,793	129,320,947	72,125	2,209	156,308,744	70,760
100,000 " 200,000	1,355	191,675,689	141,458	1,688	237,532,492	140,718
200,000 " 500,000	1,078	330,533,712	306,618	1,519	504,218,217	331,941
500,000 " 1,000,000	516	363,341,076	704,149	636	443,597,677	697,481
1,000,000 " 5,000,000	364	692,463,530	1,902,372	601	1,217,866,089	2,026,400
5,000,000 or over	56	575,592,599	10,278,439	118	1,298,198,865	11,001,685
Totals and Averages	**22,541**	**2,482,209,130**	**110,120**	**23,597**	**4,063,987,279**	**172,225**
	1935.[2]			1936.[3]		
Under $25,000	16,476	117,586,181	7,137	15,846	119,766,944	7,558
$ 25,000 but under $ 50,000	2,552	90,448,169	35,442	2,625	93,736,051	35,709
50,000 " 100,000	1,943	137,698,893	70,869	2,040	144,718,010	70,940
100,000 " 200,000	1,377	192,476,536	139,780	1,413	198,268,333	140,317
200,000 " 500,000	1,191	372,397,600	312,676	1,251	391,284,269	312,777
500,000 " 1,000,000	452	315,147,466	697,229	512	358,345,875	699,894
1,000,000 " 5,000,000	396	786,490,824	1,986,088	447	949,275,501	2,123,659
5,000,000 or over	63	657,976,801	10,444,076	68	747,008,831	10,985,423
Totals and Averages	**24,450**	**2,670,222,470**	**109,212**	**24,202**	**3,002,403,814**	**124,056**

[1] These figures include the production of "central electric stations" and the "dyeing, cleaning and laundry" industry. [2] These figures include the production of the "dyeing, cleaning and laundry" industry but not of "central electric stations". [3] These figures include neither "central electric stations" nor the "dyeing, cleaning and laundry" industry.

29.—Manufacturing Establishments, Grouped According to Gross Values of Products, with Total Values of Products in each Class, by Provinces, 1936.

Group of Gross Values.	Prince Edward Island.		Nova Scotia.		New Brunswick.	
	Establishments.	Production.	Establishments.	Production.	Establishments.	Production.
	No.	$	No.	$	No.	$
Under $25,000	204	1,286,323	937	5,387,583	607	3,825,384
$ 25,000 to $ 50,000	16	551,579	76	2,646,625	64	2,274,535
50.000 to 100,000	6	370,528	61	4,208,223	40	2,876,709
100,000 to 200,000	7	1,102,793	38	5,261,746	30	4,298,703
200,000 to 500,000	Nil	–	27	8,253,442	26	8,762,322
500,000 to 1,000,000	"	–	7	4,479,488	5	3,053,527
1,000,000 to 5,000,000	"	–	12	37,547,863	12	31,134,021
5,000,000 or over	"	–	Nil	–	Nil	–
Totals	**233**	**3,311,223**	**1,158**	**67,784,970**	**784**	**56,225,201**

29.—Manufacturing Establishments, Grouped According to Gross Values of Products, with Total Values of Products in each Class, by Provinces, 1936—concluded.

Group of Gross Values.	Quebec.		Ontario.		Manitoba.	
	Establishments.	Production.	Establishments.	Production.	Establishments.	Production.
	No.	$	No.	$	No.	$
Under $25,000	5,680	40,205,272	5,637	49,979,212	616	4,355,987
$ 25,000 to $ 50,000	713	25,133,530	1,247	44,727,786	118	4,441,495
50,000 to 100,000	534	37,743,351	1,006	71,589,411	103	7,201,098
100,000 to 200,000	375	52,531,957	709	100,078,722	74	10,237,055
200,000 to 500,000	377	118,475,011	618	191,872,409	57	17,661,483
500,000 to 1,000,000	143	100,442,428	274	192,189,225	26	19,118,949
1,000,000 to 5,000,000	120	262,658,457	228	449,252,418	14	32,472,131
5,000,000 or over	27	226,497,383	34	447,862,748	3	26,562,304
Totals	**7,969**	**863,687,389**	**9,753**	**1,547,551,931**	**1,011**	**122,050,502**
	Saskatchewan.		Alberta.		British Columbia.	
Under $25,000	510	2,637,304	630	4,150,070	1,025	7,939,809
$ 25,000 to $ 50,000	68	2,388,979	114	4,116,759	209	7,454,763
50,000 to 100,000	53	3,856,130	76	5,233,480	161	11,639,080
100,000 to 200,000	33	4,460,978	33	4,363,059	114	15,933,320
200,000 to 500,000	17	5,112,120	24	8,290,442	105	32,857,040
500,000 to 1,000,000	4	2,067,878	11	7,633,096	42	29,361,284
1,000,000 to 5,000,000	9	31,081,121	17	40,265,104	35	64,864,386
5,000,000 or over	Nil	–	Nil	–	4	46,086,396
Totals	**694**	**51,604,510**	**905**	**74,052,010**	**1,695**	**216,136,078**

Size of Establishments as Measured by Number of Employees.—In 1923, establishments employing 501 hands or over accounted for 21·4 p.c. of the total number of employees engaged in manufacturing. By 1929 it had increased to 27·3 p.c. of the total, thereby showing the increasing concentration of production into larger units. This tendency, however, was checked by the depression, the percentage having dropped in 1933 to 20·5 p.c. (central electric stations included), With the recovery in production since 1933 the percentage has risen again and in 1936 stood at 24·4 p.c. The same also holds true for all establishments employing 101 hands or over. In 1923 they employed 58·6 p.c. of the total, in 1929, 61·9 p.c., in 1933, 55·7 p.c., and in 1936, 61·2 p.c.

30.—Establishments and Employees in Canadian Manufactures, Grouped According to the Number of Employees per Establishment, 1923, 1929, 1935, and 1936.

Group.	1923.[1]			1929.[1]		
	Establishments.	Employees.	Average Employed.	Establishments.	Employees.	Average Employed.
	No.	No.	No.	No.	No.	No.
Fewer than 5 employees	13,156	22,789	1·7	12,273	30,446	2·5
5 to 20 employees	5,310	53,852	10·1	6,160	62,310	10·1
21 " 50 "	2,093	67,408	32·2	2,531	81,846	32·3
51 " 100 "	1,031	73,449	71·2	1,262	90,238	71·5
101 " 200 "	566	79,737	140·9	745	103,944	139·5
201 " 500 "	374	115,585	309·1	444	136,397	307·2
501 or over	112	112,447	1,004·0	182	189,253	1,040·0
Totals and Averages	**22,642**	**525,267**	**23·2**	**23,597**	**694,434**	**29·4**
	1935.[2]			1936.[3]		
Fewer than 5 employees	13,719	24,058	1·8	13,441	26,659	2·0
5 to 20 employees	6,390	62,737	9·8	6,353	62,298	9·8
21 " 50 "	2,173	69,792	32·1	2,151	69,017	32·1
51 " 100 "	1,027	71,660	69·8	1,042	72,902	70·0
101 " 200 "	613	84,825	138·4	657	91,966	140·0
201 " 500 "	386	115,331	298·8	411	126,368	307·5
501 or over	142	139,013	979·0	147	145,149	987·4
Totals and Averages	**24,450**	**567,416**	**23·2**	**24,202**	**594,359**	**24·6**

[1] See footnote 1, Table 28. [2] See footnote 2, Table 28. [3] See footnote 3, Table 28.

31.—Establishments and Employees in Canadian Manufactures, by Provinces, and Average Number of Employees per Establishment, 1936.

Province and Item.	Under 5 Employees.	5-20.	21-50.	51-100.	101-200.	201-500.	501 or Over.	Total.
Prince Edward Island—								
Establishments	182	42	9	Nil	Nil	Nil	Nil	233
Employees	345	367	284	"	"	"	"	996
Averages per establishment	1·9	8·7	31·6	"	"	"	"	4·3
Nova Scotia—								
Establishments	736	293	71	32	9	17	"	1,158
Employees	1,466	2,743	2,258	2,149	1,247	6,081	"	15,944
Averages per establishment	2·0	9·4	31·8	67·2	138·6	357·7	"	13·8
New Brunswick—								
Establishments	471	212	52	24	14	8	3	784
Employees	964	1,985	1,700	1,651	2,016	2,892	2,502	13,710
Averages per establishment	2·0	9·4	32·7	68·8	144·0	361·5	834·0	17·5
Quebec—								
Establishments	4,870	1,724	664	311	205	133	62	7,969
Employees	8,787	17,099	21,208	21,546	28,308	41.262	56,666	194,876
Averages per establishment	1·8	9·9	31·9	69·3	138·1	310·2	914·0	24·5
Ontario—								
Establishments	4,819	2,809	996	509	341	209	70	9,753
Employees	10,327	27,665	31,913	35,958	47,885	62,783	72,461	288,992
Averages per establishment	2·1	9·8	32·0	70·6	140·4	300·4	1,035·2	29·6
Manitoba—								
Establishments	514	310	94	50	30	8	5	1,011
Employees	1,098	3,027	3,126	3,345	4,160	2,154	5,597	22,507
Averages per establishment	2·1	9·8	33·3	66·9	138·7	269·2	1,119·4	22·3
Saskatchewan—								
Establishments	473	170	28	15	8	Nil	Nil	694
Employees	863	1,460	958	1,028	1,473	"	"	5,782
Averages per establishment	1·8	8·6	34·2	68·5	184·1	"	"	8·3
Alberta—								
Establishments	593	222	48	22	8	12	"	905
Employees	1,180	2,130	1,551	1,581	1,034	4,280	"	11,756
Averages per establishment	2·0	9·6	32·3	71·9	129·2	356·7	"	13·0
British Columbia—								
Establishments	783	571	189	79	42	24	7	1,695
Employees	1,629	5,822	6,019	5,644	5,843	6,916	7,923	39,796
Averages per establishment	2·1	10·2	31·8	71·4	139·1	288·2	1,131·9	23·5

Size of Establishments of Some of the Leading Industries.—The following statement and Table 32 show the degree of concentration in some of the leading industries of Canada. Concentration is extremely marked in the cases of non-ferrous metal smelting, petroleum products, automobiles, slaughtering and meat packing, pulp and paper, and cotton yarn and cloth, whereas in the cases of butter and cheese, and sawmills, the degree of concentration is low. With regard to flour and feed mills, concentration is marked in the case of flour mills, but the small size of the average feed mill offsets this for the industry as a whole.

PERCENTAGE IMPORTANCE OF ESTABLISHMENTS, EACH WITH A GROSS PRODUCTION OF $1,000,000 OR OVER, IN CERTAIN INDUSTRIES,[1] 1936.

Industry.	Number of such Establishments.	Percentage to Total Number in the Industry.	Percentage of Total Production in the Industry.
Non-ferrous metal smelting	15	100	100
Pulp and paper	54	58	93
Slaughtering and meat packing	35	25	91
Flour and feed mills	20	1·8	64
Butter and cheese	9	0·3	13
Automobiles	9	56	99
Petroleum products	15	24	92
Sawmills	12	0·3	26
Electrical apparatus and supplies	14	8	61
Cotton yarn and cloth	21	60	91

[1] These were the ten leading industries in 1936, as per Table 12, p. 408

32.—Size of Establishments of Some of the Leading Industries, Grouped According to the Gross Value of Products, and the Number of Persons Employed, 1936.

Group and Item.		Metal Smelting.	Pulp and Paper.	Meat Packing.	Flour and Feed.	Butter and Cheese.
GROSS VALUE OF PRODUCTS.						
Under $25,000—	Establishments...No.	Nil	Nil	25	637	1,696
	Production........ $	-	-	291,089	7,069,040	20,312,165
$ 25,000 to $ 50,000—	Establishments...No.	Nil	4[1]	20	286	385
	Production........ $	-	141,318	706,878	10,152,935	13,369,250
50,000 to 100,000—	Establishments...No.	Nil	5	21	119	273
	Production........ $	-	373,148	1,633,656	7,958,858	19,368,376
100,000 to 200,000—	Establishments...No.	Nil	4	19	32	138
	Production........ $	-	481,223	2,611,727	4,177,828	18,321,113
200,000 to 500,000—	Establishments...No.	Nil	17	17	14	60
	Production........ $	-	5,790,830	5,299,216	4,203,491	17,273,684
500,000 to 1,000,000—	Establishments...No.	Nil	9	5	10	12
	Production........ $	-	6,997,279	3,577,726	7,452,719	9,415,257
1,000,000 to 5,000,000—	Establishments...No.	7[2]	42	29	15	9
	Production........ $	9,130,920	100,312,517	72,807,929	37,301,004	14,652,482
5,000,000 or over—	Establishments...No.	8	12	6	5	Nil
	Production........ $	220,606,500	71,048,288	70,043,419	36,301,224	-
NUMBER OF PERSONS EMPLOYED.						
Under 5—	Establishments...No.	Nil	Nil	33	1,005	2,075
	Employees........ "	-	-	76	1,525	4,264
5 to 20—	Establishments... "	3	3	56	80	402
	Employees........ "	15	40	607	631	3,445
21 to 50—	Establishments... "	Nil	12	17	12	56
	Employees........ "	-	436	549	367	1,743
51 to 100—	Establishments... "	3[3]	15	7	9	22
	Employees........ "	201	1,073	502	596	1,516
101 to 200—	Establishments... "	Nil	13	12	8	9
	Employees........ "	-	1,962	1,659	1,183	1,339
201 to 500—	Establishments... "	4[4]	27	11	4[5]	9[5]
	Employees........ "	1,068	9,056	3,468	1,383	3,238
501 or over—	Establishments... "	5	23	6	Nil	Nil
	Employees........ "	8,731	17,487	4,915	-	-

Group and Item.		Auto-mobiles.	Petroleum Products.	Saw-mills.	Electrical Apparatus.	Cotton Yarn, etc.
GROSS VALUE OF PRODUCTS.						
Under $25,000—	Establishments...No.	Nil	10	3,302	55	Nil
	Production........ $	-	164,215	11,947,528	539,130	-
$ 25,000 to $ 50,000—	Establishments...No.	3[1]	12	130	20	Nil
	Production........ $	92.882	412,309	4,699,011	724,613	-
50,000 to 100,000—	Establishments...No.	Nil	10	75	32	Nil
	Production........ $	-	700,060	5,151,885	2,203,926	-
100,000 to 200,000—	Establishments...No.	Nil	6	56	17	Nil
	Production........ $	-	754,879	7,732,268	2,176,191	-
200,000 to 500,000—	Establishments...No.	4[6]	10[7]	40	30	9[8]
	Production........ $	953,543	4,892,450	12,902,972	9,940,722	2,371,360
500,000 to 1,000,000—	Establishments...No.	Nil	Nil	23	18	5
	Production........ $	-	-	16,622,622	12,592,131	3,608,715
1,000,000 to 5,000,000—	Establishments...No.	6[7]	9	12	11	18
	Production........ $	10,783,620	25,142,492	21,287,005	22,540,933	38,082,799
5,000,000 or over—	Establishments...No.	3	6	-	3	3
	Production........ $	93,519,990	53,735,958	-	21,570,902	21,572,491
NUMBER OF PERSONS EMPLOYED.						
Under 5—	Establishments...No.	Nil	9	2,933	31	Nil
	Employees........ "	-	24	4,771	73	-
5 to 20—	Establishments... "	4[9]	30	473	69	Nil
	Employees........ "	32	274	4,444	761	-
21 to 50—	Establishments... "	Nil	8	129	35	5[10]
	Employees........ "	-	269	4,139	1,177	222
51 to 100—	Establishments... "	Nil	4	50	21	Nil
	Employees........ "	-	299	3,546	1,558	-
101 to 200—	Establishments... "	6[11]	5	35	14	6
	Employees........ "	664	635	5,023	1,978	729
201 to 500—	Establishments... "	Nil	4	14	11	10
	Employees........ "	-	1,235	4,122	3,291	3,162
501 or over—	Establishments... "	6[12]	3	4	5	14
	Employees........ "	12,237	2,283	2,741	8,199	13,797

---

[1] Includes 1 establishment with production of $25,000 or under.

[2] Includes 1 establishment with production of $500,000 to $1,000,000.

[3] Includes 1 establishment with 21 to 50 employees.

[4] Includes 1 establishment with 101 to 200 employees.

[5] Includes 1 establishment with 501 or over employees.

[6] Includes 1 establishment with production of $50,000 to $100,000, and 1 with $100,000 to $200,000.

[7] Includes 2 establishments with production of $500,000 to $1,000,000.

[8] Includes 2 establishments with production of $25,000 to $50,000.

[9] Includes 1 establishment with under 5 employees.

[10] Includes 2 establishments with 5 to 20 employees, and 2 establishments with 51 to 100 employees.

[11] Includes 2 establishments with 51 to 100 employees.

[12] Includes 2 establishments with 201 to 500 employees.

Subsection 5.—Power and Fuel.

Power.—The power equipment installed in manufacturing establishments is a very good barometer of the industrial development of Canada, inasmuch as the production is increasingly dependent on the power equipment. Increases and decreases in productive capacity, measured in horse-power, are not the result of temporary fluctuations in costs and values in the same manner as capital investments, values of products, etc. Power equipment will not reflect temporary depressions, but over a period of several years will indicate industrial growth or decline.

33.—Totals for Canada of Power Installed in the Manufacturing Industries, 1922-35, with Details by Provinces and Industrial Groups, 1936.

Note.—Figures in this table have been revised since publication of the 1938 Year Book; see headnote to Table **1**, p. 379.

Province or Group.	Primary Power.				Electric Motors Operated by Purchased Power.	Total Power Equipment.	Electric Motors Operated by Power Generated by Establishments Reporting	Total Electric Motors.
	Steam Engines and Turbines.	Internal Combustion Engines.	Hydraulic Turbines and Water Wheels.	Total Primary Power.				
	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.	h.p.
Totals, 1922	**554,141**	**70,271**	**578,795**	**1,203,207**	[1]	[1]	[1]	**1,162,649**
Totals, 1923	**554,191**	**46,829**	**587,191**	**1,188,211**	**958,692**	**2,146,903**	**357,136**	**1,315,828**
Totals, 1924	**647,501**	**54,214**	**575,169**	**1,276,884**	**1,250,418**	**2,527,302**	**397,262**	**1,647,680**
Totals, 1925	**680,824**	**57,232**	**596,728**	**1,334,784**	**1,542,584**	**2,877,368**	**433,926**	**1,976,510**
Totals, 1926	**698,343**	**56,068**	**603,618**	**1,358,029**	**1,764,348**	**3,122,377**	**391,708**	**2,156,056**
Totals, 1927	**712,611**	**57,133**	**587,493**	**1,357,237**	**1,920,118**	**3,277,355**	**386,183**	**2,306,301**
Totals, 1928	**731,422**	**58,765**	**657,243**	**1,447,430**	**2,132,970**	**3,580,400**	**457,291**	**2,590,261**
Totals, 1929	**762,697**	**60,841**	**645,270**	**1,468,808**	**2,386,840**	**3,855,648**	**495,921**	**2,882,761**
Totals, 1930	**793,949**	**65,586**	**668,208**	**1,527,743**	**2,511,264**	**4,039,007**	**478,428**	**2,989,692**
Totals, 1931	**780,487**	**73,376**	**667,546**	**1,521,409**	**2,578,523**	**4,099,932**	**539,430**	**3,117,953**
Totals, 1932	**735,980**	**68,551**	**653,204**	**1,457,735**	**2,684,923**	**4,142,658**	**510,837**	**3,195,760**
Totals, 1933	**738,297**	**76,583**	**657,683**	**1,472,563**	**2,662,445**	**4,135,008**	**497,392**	**3,159,837**
Totals, 1934	**774,494**	**87,120**	**597,675**	**1,459,289**	**2,770,383**	**4,229,672**	**544,714**	**3,315,097**
Totals, 1935	**774,166**	**88,265**	**603,717**	**1,466,148**	**2,865,340**	**4,331,488**	**512,177**	**3,377,517**
PROVINCE, 1936.								
Prince Edward Island	1,168	630	1,077	2,875	703	3,578	[2]	703
Nova Scotia	62,670	4,627	13,696	80,993	94,462	175,455	12,468	106,930
New Brunswick	65,001	4,089	28,511	97,601	105,461	203,062	48,273	153,734
Quebec	174,189	17,385	243,195	434,769	1,178,828	1,613,597	103,355	1,282,183
Ontario	265,418	45,480	249,088	559,986	1,174,325	1,734,311	241,184	1,415,509
Manitoba	14,501	3,432	25	17,958	112,153	130,111	1,359	113,512
Saskatchewan	11,765	2,725	60	14,550	21,566	36,116	61	21,627
Alberta	25,626	4,441	12	30,079	41,179	71,258	4,864	46,043
British Columbia and Yukon	122,846	9,671	112,825	245,342	249,037	494,379	116,937	365,974
Totals, 1936	**743,184**	**92,480**	**648,489**	**1,484,153**	**2,977,714**	**4,461,867**	**528,501**	**3,506,215**
INDUSTRIAL GROUP, 1936.								
Vegetable products	58,184	21,784	30,954	110,922	231,201	342,123	27,883	259,084
Animal products	26,886	6,259	2,204	35,349	91,458	126,807	2,792	94.250
Textile products	22,897	1,623	30,619	55,139	166,691	221,830	21,406	188,097
Wood and paper products	420,302	28,526	517,029	965,857	1,261,471	2,227,328	372,679	1,634,150
Iron and its products	130,456	24,002	3,599	158,057	522,981	681,038	76,342	599,323
Non-ferrous metal products	23,429	2,708	55,550	81,687	379,442	461,129	13,910	393,352
Non-metallic mineral products	40,445	7,189	26	47,660	189,503	237,163	5,863	195,366
Chemicals and allied products	17,491	238	8,508	26,237	111,205	137,442	7,521	118,726
Miscellaneous industries	3,094	151	[2]	3,245	23,762	27,007	105	23,867

---

[1] Not available. [2] None reported.

Central electric stations, which generate electricity for sale for both lighting and power purposes have been eliminated from the manufacturing statistics and, therefore, are not included in Table **33**. Internal combustion engines include all gasoline engines, gas engines (natural, coal, and producer gas), and diesel and semi-diesel or other engines which produce power by burning the fuel in the cylinder.

The great increase since 1923 in the power equipment of manufacturing industries has been in electric motors operated by power purchased from central electric stations. Nearly 96 p.c. of the power installation of these stations is water power (see Water Powers chapter, p. 364). However, some sections of Canada are not so well provided with water power and in such sections primary power derived from steam engines and turbines and internal combustion engines has also increased rapidly during the period covered. In the provinces of Prince Edward Island, Nova Scotia, Saskatchewan, and Alberta, power produced from fuels is an important factor. The total installation of electric motors increased 2,190,387 h.p., or 167 p.c. in the 13 years from 1923 to 1936, by far the greatest part of this increase being in motors operated by power purchased from central electric stations.

Of the total power equipment installed in the manufacturing industries (Table **33**), it will be seen that approximately 50 p.c. is used in the manufacture of wood and paper products; the next group in importance is iron and its products, which accounts for a little over 15 p.c.; non-ferrous metal products is third with 10·3 p.c. Together, these three groups account for about 75 p.c. of such installation.

Fuel and Electricity.—Fuel is used quite generally throughout the industrial field for the generation of power by means of steam and internal combustion engines. It is also used for the heating of plants, and for providing the heat necessary to some manufacturing processes. The most important industries where heat is applied to the materials to facilitate or accomplish the desired transformation are foundries and machine shops, brick, tile, lime, and cement making, petroleum refining, the glass industry, distilleries, food preparation, rubber goods, etc. Fuel used for such heating purposes, as well as for power, is included in the figures of Table **34**. In addition to the electricity used for ordinary power purposes, the figures include also the electricity used for heating boilers in the pulp and paper industry. Consumption of surplus energy in electric boilers has increased rapidly in recent years.

The figures of the table do not include fuel charged in furnaces in metallurgical operations as in the iron and steel industry and in non-ferrous metal smelting. Neither do they include fuels which constitute the raw materials to be transformed as coal in the coke and gas industries and crude petroleum in the refining industry. Electricity used in metallurgical processes as in the electrolytic refining of non-ferrous metals is also excluded.

The value of fuel consumed was $53,790,000 in 1924, $60,564,000 in 1929, and $44,816,000 in 1936. The value was, therefore, lower in 1936 than in 1924. The quantity of bituminous coal, the principal fuel consumed, declined by 17 p.c. and its value by 28 p.c. The cost of electricity, on the other hand, has increased during the same period by 134 p.c. and there has been a decline in the average unit cost of electricity as there has been in the case of fuels. According to Table **4**, of the Water Powers chapter, p. 364, the revenue of central electric stations from the sale of power, per kilowatt hour generated, has declined by 33 p.c. from 1924 to 1936. Out of a fuel account of $44,815,665, Ontario's requirements cost $22,550,167 or 50·3 p.c. of the total; Quebec's cost $12,066,700 or 27 p.c.; Nova Scotia's $2,691,890; and British Columbia's $2,676,212.

34.—Fuel and Electricity Used in the Manufacturing Industries of Canada, 1922-35, with Details by Provinces and Groups, 1936.

NOTE.—Figures in this table have been revised since publication of the 1938 Year Book; see headnote to Table 1, p. 379.

Province or Group.	Bituminous Coal.		Anthracite Coal.		Lignite Coal.	Coke.	Fuel Oils.	Wood.	Gas.	Other Fuel.[1]	Cost of Electricity.	Total.
	short tons.	$	short tons.	$	$	$	$	$	$	$	$	$
Totals, 1922	3,914,141	29,472,236	244,124	2,400,389	489,840	3,295,785	5,462,572	2,001,113	1,599,185	1,522,829	[2]	46,243,949[3]
Totals, 1923	5,338,446	38,283,135	282,220	2,407,168	509,014	3,237,497	5,970,810	2,444,582	1,896,295	1,349,549	[2]	56,098,050[3]
Totals, 1924	5,442,749	33,944,237	337,041	2,625,644	575,047	2,227,856	5,549,456	2,479,312	4,648,333	1,740,056	18,739,585	72,529,526
Totals, 1925	5,359,910	31,817,738	317,508	2,454,938	608,387	5,024,427	6,933,153	2,580,267	3,516,646	1,793,702	22,410,722	77,139,980
Totals, 1926	5,776,719	34,500,291	283,678	2,173,178	533,928	4,157,935	7,102,676	2,533,424	4,182,186	1,496,882	26,235,597	82,916,097
Totals, 1927	6,177,059	34,552,608	301,446	2,331,940	582,771	3,867,043	6,862,229	2,359,951	5,207,853	1,278,994	31,393,484	88,436,873
Totals, 1928	6,379,337	36,406,271	263,939	1,977,964	745,687	1,787,828	6,884,693	2,332,090	5,374,007	1,131,819	33,790,079	90,430,438
Totals, 1929	6,787,640	37,765,943	258,457	1,861,253	707,058	2,332,823	7,926,574	2,604,803	6,125,954	1,239,563	37,824,395	98,388,366
Totals, 1930	6,006,251	32,109,678	241,028	1,752,393	722,912	1,906,850	7,287,460	2,222,243	5,895,325	1,163,440	39,651,414	92,711,715
Totals, 1931	5,046,264	27,338,993	130,520	999,358	448,416	1,784,288	5,545,743	1,720,700	4,930,991	1,152,203	37,276,526	81,197,218
Totals, 1932	3,883,637	20,438,561	136,947	1,002,634	497,154	1,592,015	4,684,042	1,483,066	4,692,700	974,884	34,764,666	70,129,722
Totals, 1933	3,525,828	18,342,019	145,017	1,033,154	522,626	1,574,426	4,606,527	1,635,689	4,827,310	981,591	33,092,334	66,615,676
Totals, 1934	3,936,088	21,372,079	166,242	1,166,745	601,520	1,670,877	5,182,216	1,450,553	5,734,229	1,549,086	38,150,061	76,877,366
Totals, 1935	4,024,956	22,108,876	173,188	1,191,905	684,396	1,921,138	5,981,169	1,419,130	5,707,589	1,773,040	40,489,645	81,279,888
PROVINCE, 1936.												
Prince Edward Island	2,988	22,846	46	484	–	3,278	1.112	7,613	–	4,333	16,328	55,994
Nova Scotia	303,565	1,284,038	865	9.821	105	115,360	503.599	28,095	723,294	27,578	1,226,670	3,918,560
New Brunswick	342,628	1,586,517	722	7,804	49	21,353	84,862	71,288	18,428	75,954	1,284,608	3,150,863
Quebec	1,157,800	6,630,901	112,849	727,460	–	267,314	1,944,841	545,778	1,609,476	340,930	19,077,932	31,144,632
Ontario	2,441,013	13,822,169	52,500	425.058	12,150	1,354.322	2,253,208	428,461	3,495,884	758,915	15,646,766	38,196,933
Manitoba	67,623	471,720	9,304	99,181	423,526	34,126	184,092	119,113	87,133	43,988	1,197,968	2,660,847
Saskatchewan	16,524	91,458	291	1,363	160,439	18,429	192,691	57,393	66,430	27,738	491,917	1,107,858
Alberta	88,595	210,461	116	705	138,142	11,409	70,227	22,266	364,060	28,685	521,890	1,367,845
British Columbia and Yukon	85,013	449,913	176	2,202	5,688	57,434	1,146,679	141,069	218.898	654,329	4,317,402	6.993,614
Totals, 1936	**4,505,749**	**24,570,023**	**176,869**	**1,274,078**	**740,099**	**1,883,025**	**6,381,311**	**1,421,076**	**6,583,603**	**1,962,450**	**43,781,481**	**88,597,146**
INDUSTRIAL GROUP, 1936.												
Vegetable products	606,346	3,312,083	47,683	423,125	197,204	405,135	605,278	428.955	654,280	238,660	3,499,136	9.763,856
Animal products	330,379	1,832,894	5,489	41,918	268,278	13,323	247,013	468,738	124,900	119,179	1,749.604	4,865,847
Textiles and textile products	409,562	2,458,065	22,474	117,063	1,374	23,178	323,565	33,225	65,755	101,475	3,147,353	6,271,053
Wood and paper products	1,356,717	7,537,797	55,168	372,573	12,072	22,212	944,073	205,572	145,472	1,115,740	19,749,200	30,104,711
Iron and its products	842,562	4,195.490	26,217	176,348	234.426	375.901	1,609,716	55,408	1,990,031	198,640	5,090,171	13,926,131
Non-ferrous metal products	136,981	784,776	5,823	48,069	1.456	89,873	240,748	3,309	159,387	26,763	4,603,136	5,957,517
Non-metallic mineral products	502,826	2,773,486	7,370	44,355	22,799	899,133	2,214,437	199,749	3,385,004	64,803	2,925,837	12,529,603
Chemicals and allied products	294,036	1,517,563	4,521	34,699	1,221	50,470	177,072	22,688	28,146	94,288	2,611,554	4,537,701
Miscellaneous industries	26,340	157,869	2,124	15,928	1,269	3,800	19,409	3,432	30,628	2,902	405,490	640,727

---

[1] Including gasoline and kerosene.

[2] Cost of electricity not available.

[3] Does not include the cost of electricity.

The groups of industries in which fuel was most extensively used in 1936 were: wood and paper $10,355,511, non-metallic minerals $9,603,766, iron and steel products $8,835,960, and vegetable products $6,264,720.

The wood and paper products group is the largest user of electric power, the consumption in 1936 being 45·1 p.c. of the total cost of power used by all manufacturing industries. The iron and its products group ranks second with only 11·6 p.c. of the total. Other principal users were non-ferrous metal products, vegetable products, and textiles.

In the provinces of Quebec and British Columbia the cost of electricity exceeded that of fuel. The expenditure of Quebec, which is the largest user of electric power, represented 43·5 p.c.; and British Columbia, 9·9 p.c.

Section 5.—Manufacturing Industries in Cities and Towns.

The prosperity of most of the cities and towns of Canada, especially in the East, is intimately connected with their manufacturing industries, which provide employment for a large proportion of their gainfully occupied population. In the West the cities are more largely distributing centres, though manufactures are rapidly increasing there also.

Table **35**, indicating the extent to which the manufacturing industries of Canada are concentrated in urban centres, shows by provinces the proportion of the gross manufacturing production contributed by cities and towns having a gross production of over $1,000,000 each. In the more highly industrialized provinces of Ontario and Quebec such cities and towns account for over 90 p.c. of the total, while in British Columbia and the Maritime Provinces, where sawmilling, fish packing, and dairying are leading industries, the proportion falls to about 69 p.c. In the Prairie Provinces manufacturing is confined largely to a few large urban centres.

35.—Cities and Towns with a Gross Manufacturing Production of over $1,000,000 each, Number of Establishments and Total Gross Production in such Cities and Towns as a Percentage of the Grand Total, by Provinces, 1936.

Note.—Statistics published in this table are in some cases higher than the figures published in Table **37**, since, in the table below are included statistics of towns with less than three establishments and production of over $1,000,000 each. It was not possible to publish this information in Table **37** without disclosing the operations of individual establishments.

Province.	Cities and Towns with a Gross Production of over $1,000,000 each.	Establishments Reporting in Cities and Towns Producing over $1,000,000 each.	Total Production in Cities and Towns Producing over $1,000,000 each.	Total Production in each Province.	Production in Cities and Towns as a Percentage of Total Production in each Province.
	No.	No.	$	$	p.c.
Prince Edward Island	1	34	1,493,319	3,311,223	45·1
Nova Scotia	10	252	46,724,567	67,784,970	68·9
New Brunswick	8	223	38,513,246	56,225,201	68·5
Quebec	54	3,556	780,426,293	863,687,389	90·4
Ontario	102	6,366	1,463,044,997	1,547,551,931	94·5
Manitoba	5	657	104,580,074	122,050,502	85·7
Saskatchewan	4	221	39,499,792	51,604,510	76·5
Alberta	5	376	60,522,961	74,052,010	81·7
British Columbia	10	1,129	149,929,469	216,136,078	69·4
Totals	**199**	**12,814**	**2,684,734,718**	**3,002,403,814**	**89·4**

The six chief manufacturing cities of Canada in 1936 were: Montreal, Toronto, Hamilton, Windsor, Vancouver, and Winnipeg. Montreal proper exceeded Toronto proper by a slight margin. Greater Montreal was also ahead of Greater Toronto and continued to be the leading manufacturing area in the Dominion. According to the Census of 1931, Hamilton was proportionately the most largely dependent of these cities upon manufacturing industries. About 45 p.c. of its gainfully occupied population was employed in manufacturing. The amalgamation of the border cities to form the present city of Windsor did not occur until 1934, but the original city of Windsor at the time of the Census of 1931 had 34 p.c. of its gainfully employed population engaged in manufacturing. Toronto had 28 p.c., Montreal 27 p.c., Winnipeg, 18 p.c., and Vancouver 16 p.c.

Nineteen other important cities with a gross production of manufactured goods of over $15,000,000 in 1936 were as follows, in descending order of the value of their products: Montreal East, Oshawa, London, Kitchener, Quebec, Calgary, Peterborough, Ottawa, Three Rivers, Brantford, Edmonton, Sarnia, St. Boniface, New Toronto, Niagara Falls, St. Catharines, Cornwall, Saint John, and Welland. Statistics of manufactures of cities and towns with a gross production of $1,000,000 or over and with three or more establishments are given for 1936 in Table **37.**

36.—Principal Statistics of the Manufacturing Industries of the Six Leading Manufacturing Cities of Canada, 1932-36.

NOTE.—The dyeing, cleaning and laundry industry is included for the years prior to 1936.

City and Year.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Materials.	Gross Value of Products.[1]
	No.	$	No.	$	$	$
Montreal.......................1932	2,088	363.851,307	78,633	80,734,197	147,093,263	310,502,225
1933	2,226	363,342,078	80.212	74,150,933	148,504,215	300.636,197
1934	2,360	373,098.770	88,131	84,228,834	185,459,720	361.058,212
1935	2,346	382,332,791	94,612	89,934.540	201.022,033	383,547,972
1936	2,372	389,225,593	95,420	96,705,020	228,676,144	427,270,916
Toronto.......................1932	2,370	417,748,359	76,652	88,204,053	147,910,861	323,326,758
1933	2,604	388,995,096	75,645	80,855,883	146,286,472	308,983,639
1934	2,627	392,080,083	81,629	89,569,170	174,820,861	357,706,747
1935	2,689	386,898,652	86,226	97,144,947	190,370,255	385,883,455
1936	2,762	396,257,696	89,056	102,217,057	209,320,347	417,724,888
Hamilton.......................1932	445	176,981,408	21,733	23,378,011	34,372,679	83,068,855
1933	469	171.625,714	21,524	21,523,337	35.672,272	83,530,255
1934	494	174,755,759	24,072	25,772,958	44,548,853	100,272,872
1935	484	176,246,963	26,769	30,162,244	53,740.074	114,691,789
1936	466	176,519,530	28,625	32,288,022	61,676,060	130,578,232
Windsor[2].......................1932	246	72,317,312	10,410	13,470,342	24,298,607	49,285,543
1933	247	66,398,372	10,212	10,719,819	25,752.258	49,359,245
1934	251	63,066.481	11,926	15,057,327	43,208,280	76,487.032
1935	236	64,298,564	15,227	20,714.545	64,062,711	104,908,197
1936	214	66,934,274	15,613	21,180,684	59,871,643	104,556,881
Vancouver.......................1932	717	78,670,170	11,851	12,506.703	26,970,636	54,532,881
1933	746	74,209,271	12,094	11,754,124	28,588,106	55,160,883
1934	773	84,254,515	13,206	13,595,812	34,258,919	63,475,103
1935	811	83,594,899	15,683	16,789,590	39,863,397	73.981,872
1936	807	83,199,508	16,397	18,479,302	47,394,136	87,581,068
Winnipeg.......................1932	559	70,201,107	16,119	17,426,358	26,989,727	56,415,286
1933	600	73,886,398	15,336	15,155,537	28,355,612	59,287,280
1934	612	75,513,530	15,745	15,985,206	31,761,326	60,860,444
1935	616	71,837,683	16,649	17,568,803	36,825,174	67,217,042
1936	594	71,757,177	16,673	18,060,555	40,822,725	73,316,055

---

[1] Net value is derived from gross value by deducting costs of materials, fuel, and electricity. For cost of fuel and electricity in 1936 see Table **37.**

[2] The figures for Windsor include constituent towns prior to the amalgamation in 1934.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of $1,000,000 or Over, and with Three or More Establishments, 1936.

Municipality.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials.	Gross Value of Products.[1]
	No.	$	No.	$	$	$	$
Prince Edward Island—							
Charlottetown	34	1,249,052	377	312,811	29,278	902,364	1,493,319
Nova Scotia—							
Sydney	27	23.835,309	2,333	3,028,165	1,621,336	7,028,509	14,398,012
Halifax	94	13,541,226	2,858	2,973,483	201,587	4,655,974	10,391,756
Dartmouth	13	4,336.703	402	466,708	163,929	3,412,435	5.268,319
Liverpool	5	10,925,940	547	846,868	654,164	1,217,252	4,283,656
Trenton	3	7,270,071	657	582,090	134,915	2,356,792	3,661,118
Truro	23	3,065,510	1,007	749,141	50,198	1,715,426	3,150,118
Yarmouth	30	2,202,544	507	380,075	64,391	854,993	1,729,958
New Glasgow	22	1,722,995	496	472,981	91,108	469,604	1,374,686
Amherst	24	3,104,138	460	389,089	67,205	641,891	1,253,550
Windsor	11	993,992	305	221,805	25,247	778,201	1,213,394
New Brunswick—							
Saint John	118	18,122,894	2,663	2,678,937	340,990	10,310,698	16,432,304
Moncton	39	6,256,067	1,959	2,025,772	156,611	3,380,458	5,962,274
Edmundston	8	6,098,505	504	490,335	452,742	1,503,527	3,553,892
Bathurst	13	6,483,322	704	844,382	360,842	1,178,546	2,875,008
St. Stephen	12	1,842,776	516	405,305	37,206	903,313	1,679,583
Milltown	3	2,826,119	592	441,375	29,450	717,493	1,335,557
Fredericton	27	1,493,141	389	318,850	32,238	614,600	1,246,838
Quebec—							
Montreal	2,372	389,225,593	95,420	96,705,020	6,878,092	228,676,144	427,270,916
Montreal East	10	37,969,569	1,725	2,240,594	1,614,582	39,929,718	51,398,777
Quebec	286	46,761,131	8,905	7,711,422	1,514,138	12,944,100	27,481,060
Three Rivers	58	59,233,078	5,338	5,530,911	3,072,202	10,140,744	24,911,465
Sherbrooke	74	21,262,300	4,938	4,477,426	372,824	6,810,957	14,869,311
Shawinigan Falls	25	39,366,124	2,779	3,065,504	1,942,934	5,835,468	14,064,579
Drummondville	24	19,996,217	4,414	4,341,421	615,063	4,588,047	13,526,367
La Salle	9	19,157,404	1,187	1,444,105	948,953	4,701,521	12,994,634
St. Hyacinthe	60	10,934,894	3,698	2,548,732	249,186	6,454,689	11,213,961
Hull	46	15,105,848	2,366	2,346,082	596,915	5,303,938	10,667,598
Granby	34	12,063,273	2,845	2,286,325	166,189	4,512,983	10,277,546
Magog	20	7,166,430	1,584	1,357,888	264.740	7,682,939	10,195,356
St. Jean	45	10,600,910	2,830	2,497,408	252,925	4,557,275	9,959,348
Lachine	31	14,650,480	2,200	2,946,151	267,064	3,624,629	8,636,479
Valleyfield	30	10,151,889	2,523	2,010,829	250,113	4,305,001	7,848,167
St. Jérôme	30	7,335,469	1,999	1,473,498	121,358	2,524,079	7,021,678
Grand'Mère	16	15,869,802	1,496	1,301,308	655,966	2,212,358	5,595,584
Kenogami	6	11,922,428	932	1,307,507	718,258	2,049,696	5,051,666
La Tuque	13	11,867,864	768	862,996	357,398	2,227,911	4,734,804
Belœil	10	2,716,150	422	570,525	67,658	1,827,875	3,726,468
Buckingham	10	8,477,362	522	683,917	602,694	1,531,682	3,344,518
Louiseville	13	2,329,389	1,052	673,161	90,395	1,725,989	2,890,596
Farnham	14	3,931,555	638	505,754	87,273	1,328,748	2,809,876
Windsor	10	5,791,627	672	615,006	193,807	929,281	2,691,521
Dolbeau	5	10,629,824	277	476,212	523,228	776,204	2,674,752
Westmount	10	1,298,884	652	816,796	52,166	858,757	2.620,077
Victoriaville	23	2,483,511	1,296	934,513	49,073	990,830	2,488,792
East Angus	8	5,248,043	617	585,756	395,858	1,116,357	2,451,514
Brownsburg	7	1,890,362	635	675,748	23,895	875,799	2,389,738
Cowansville	12	2,674,771	964	707,807	47,222	1,079,649	2,300,099
Lachute	9	3,402,784	553	464,496	20,699	1,110,568	2,171,823
Joliette	37	1,780,206	851	557,479	84,310	1,040,300	2,151,595
Montmagny	22	2,933,905	813	592,663	42,683	1,051,481	2,135,835
Coaticook	22	2,011,505	686	386,308	30,560	988,631	1,890,110
Beauharnois	9	3,314,198	398	410,108	65,647	631,339	1,557,566
Sorel	18	2,034,461	845	742,784	75,783	464,071	1,544,043
St. Laurent	8	1,459,823	619	616,009	48,516	767,383	1,445,209
Plessisville	15	1,092,614	453	297,245	17,303	802,051	1,400,070
Outremont	8	1,197,196	362	397,480	9,292	702,191	1,397,234
Jonquière	10	1,308,704	250	305,063	66,625	613,772	1,366,460
Cap de la Madeleine	10	952,311	296	185,983	13,521	743,988	1,169,217
Longueuil	9	1,165,178	385	379,952	16,046	554,439	1,144,943
Acton Vale	9	924,640	388	247,470	23,907	538,522	1,117,771
St. Rémi	7	898,685	256	133,125	21,265	715,482	1,112,085
Marieville	15	775,559	426	248,594	15,058	660,272	1,083,189
Rock Island	11	965,588	368	297,717	22,324	321,858	1,050,296
Berthier	9	5,708,196	257	185,874	43,980	478,396	1,037,560

---

[1] Net value is derived from gross value by deducting cost of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of $1,000,000 or Over, and with Three or More Establishments, 1936—continued.

Municipality.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials.	Gross Value of Products.[1]
	No.	$	No.	$	$	$	$
Ontario—							
Toronto	2,762	396,257,696	89,056	102,217,057	6,500,881	209,320,347	417,724,888
Hamilton	466	176,519,530	28,625	32,288,022	4,925,883	61,676,060	130,578,232
Windsor	214	66,934,274	15,613	21,180,684	1,615,883	59,871,643	104,556,881
Oshawa	45	22,987,758	5,914	7,422,043	487,035	28,909,333	46,169,879
London	237	38,301,180	8,978	9,683.251	641,797	18,494,187	43,304,208
Kitchener	158	33,818,427	8,577	8,466,965	573,036	18,911,441	39,371,555
Peterboro	77	21,301,407	5,046	4,790,757	401,892	14,949,058	26,877,321
Ottawa	200	33,112,537	6,540	7,782,206	605,459	10,805,581	25,043,818
Brantford	109	38,025,348	6,384	6,219,900	576,860	11,478,219	23,532,005
Sarnia	42	17,842,608	2,852	3,592,036	1,033,274	18,349,179	23,116,589
New Toronto	19	26,122,504	2,627	3,531,467	488,938	10,831,266	22,073,365
Niagara Falls	63	25,902,579	2,989	3,662,389	1,246,885	6,568,087	19,125,082
St. Catharines	95	19,149,463	4,491	4,875,359	424,465	8,583,258	17 637,068
Cornwall	41	25,278,073	4,766	4,355,196	753,000	6,483,430	16.500,009
Welland	44	21,120,903	3,682	3,763,423	941,924	7,175,743	16,014,930
Sault Ste. Marie	46	39,588,937	2,635	3,555,843	1,573,143	6,479,882	14,506,305
Chatham	55	11,628,606	1,983	2,069,411	301,694	9,731,360	13,759,995
Guelph	88	12,819,283	3,752	3,510,853	326,230	6,194,563	13,074,892
Galt	78	13,737,130	4,049	3,609,526	275,517	4,806,980	11,308,835
Leamington	16	5,916,833	1,174	953,804	116,822	6,028,403	11,065,297
Thorold	16	18,342,266	1,437	2,178,762	1,418,690	4,355,778	10,406,618
Woodstock	50	7,199,207	2,220	1,951,968	148,425	4,441,799	8,763,399
Leaside	25	8,928,356	1,606	1,946,697	145,465	3,357,676	8,708,468
Simcoe	28	8,986,448	1,009	984,177	96,555	5,407,161	8,430,920
Stratford	55	7,899,473	2,419	2,431,506	184,895	4,627,916	8,257,152
Brockville	30	5,094,176	951	950,019	115,400	5,710,620	7,688,060
Kapuskasing	5	32,356,517	784	1,254,806	500,955	2,424,752	6,355,148
Kingston	56	7,884,936	1,448	1,360,153	146,266	3,004,893	6,207,399
Waterloo	44	8,585,956	1,313	1,228,441	99,849	2,207,324	6,060,543
Preston	31	5,607,654	1,636	1,628,746	106,888	2,795,897	5.733,321
Chippewa	3	1,409,906	287	427,024	309,047	1,094,674	5,462,180
Delhi	7	1,178,769	533	341,778	15,174	4,674,668	5,196,653
Port Arthur	25	15,129,731	1,072	1,471,403	688,433	2,049,100	5,083,714
Merritton	8	5,385,813	857	1,156,032	240,524	2,235,940	4,745,516
Fort William	32	15,917,827	775	1,053,246	657,526	2,317,205	4,649,600
Owen Sound	55	5,645,474	1,443	1,200,189	88,625	2,047,249	4,167,019
Paris	20	5,282,476	1,221	1,068,251	97,771	2,036,143	4,097,261
Tilbury	7	1,118,851	434	439,862	34,479	2,891,830	4.096,428
Wallaceburg	15	4,287,449	924	1,008,196	292,974	1,783,061	3,944,139
Belleville	44	5,234,530	1,176	939,071	195,207	1,672,179	3,674,298
Newmarket	14	3,879,058	794	822,964	56,131	2,225,285	3,519,161
Trenton	23	3,379,389	718	635,782	167,074	1,907,831	3,413,184
Port Credit	3	4,320,574	258	348,267	108,284	1,729,826	3,378,644
Ingersoll	21	4,215,888	739	707,750	74,693	2,020,778	3,284,906
Kenora	16	10,809,212	430	566,332	583,260	1,852,298	3,273,895
Goderich	14	1,501,785	214	176,024	57,874	2,642,885	3,193,882
Petrolia	10	2,681,535	201	96,701	43,183	2,172,885	3,130,038
St. Thomas	41	3,279,896	954	897,906	77,388	1,416,230	3,057,689
Fergus	13	1,937,778	847	841,240	48,866	1,517,514	3,041,498
Bowmanville	11	2,911,774	523	523,828	82,033	1,198,148	2,985,588
Hespeler	15	3,869,755	1,165	900,196	152,071	1,437,045	2,979,347
Amherstburg	9	2,826,558	305	429,223	277,832	597,308	2,950,342
Perth	19	3,124,981	854	884,332	51,000	1,349,858	2,917,925
Weston	14	3,079,031	729	802,931	67,681	1,259,490	2,901,793
St. Mary's	17	5,137,810	389	418,585	310,905	1,283,021	2,838,604
Cobourg	26	2,903,889	534	557,816	72,817	1,270,516	2,733,582
Port Hope	29	2,102,703	653	693,948	82,786	908,456	2,694,336
Fort Erie	30	2,323,639	415	494,796	39,106	1,137,031	2,687,970
Tilsonburg	20	1,475,195	486	409,405	58,233	2,051,756	2,684,133
Dunnville	18	3,723,630	815	761,502	48,460	1,430,879	2,680,262
Barrie	21	1,289.929	428	376,341	39,613	1,719,883	2,603,339
Brampton	24	2,433,305	833	833,616	34,086	1,333,116	2,567,341
Orillia	35	3,657,550	841	747,559	51,212	1,276,252	2,554,783
Hawkesbury	7	2,048,347	484	600,459	310,022	1,331,690	2,542,884
Pembroke	35	3,953,509	800	614,637	48,149	1,195,701	2,485,397
Renfrew	21	2,251,398	750	648,708	68,498	1,192,884	2,361,030
Georgetown	12	2,607,644	519	494,660	87,535	1,304,622	2,277,218
Huntsville	10	2,130,546	331	240,018	33,740	1.488,213	2,234,905
Hanover	16	2,511,727	665	543,012	42,507	1,100,803	2,089,666
Kingsville	15	2,583,199	396	278,553	16,003	1,467,080	2,001,820

---

[1] Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

37.—Statistics of Manufactures of Municipalities, each with a Gross Production of $1,000,000 or Over, and with Three or More Establishments, 1936—concluded.

Municipality.	Establishments.	Capital.	Employees.	Salaries and Wages.	Cost of Fuel and Electricity.	Cost of Materials.	Gross Value of Products.[1]
	No.	$	No.	$	$	$	$
Ontario—concluded.							
Lindsay	34	1,770,015	605	495,606	64,895	959,998	1,964,694
Sudbury	32	2,489,050	444	504,539	41,619	964,016	1,954,233
Aurora	8	1,326,209	415	410,906	24,729	1,212,375	1,911,689
Carleton Place	14	1,620,793	703	618,675	59,374	880,684	1,860,383
Aylmer	9	1,012,800	144	155,503	36,624	1,071,539	1,855,772
Burlington	10	1,517,369	315	253,346	28,391	1,033,689	1,796,182
Midland	13	1,915,864	210	181,059	21,153	1,564,569	1,784,986
Dundas	19	3,253,116	600	676,924	35,211	739,225	1,759,955
Humberstone	4	760,536	430	361,403	5,217	916,314	1,390,383
Oakville	19	1,226,770	432	377,454	27,771	732,299	1,376.737
Smith's Falls	20	2,287,489	482	464,790	46,730	725,459	1,372,643
Chesterville	5	633,614	69	68,280	24,321	889,764	1,361,618
Strathroy	14	1,318,296	342	259,901	25,128	895,437	1,353,151
Arnprior	15	2,135,856	256	292,083	36,888	480,087	1,313,406
Timmins	28	1,616,274	328	315,166	31,448	495,911	1,310,820
Dryden	7	5,330,276	233	312,040	150,717	520,048	1,277,543
Streetsville	8	308,970	98	103,404	9,345	1,049,790	1,273,005
Gananoque	17	1,948,134	302	337,285	52,505	592,390	1,238,853
Fort Frances	8	2,221,158	433	342,048	6,540	731,198	1,220,196
Kincardine	13	1,501,171	400	293,517	28,536	672,691	1,163,154
Listowel	14	640,092	340	255,708	33,576	625,713	1,129,095
Tavistock	13	350,171	166	116,462	14,164	908,610	1,105,083
Grimsby	16	1,422,432	388	258.142	20,905	578,347	1,103.658
Elmira	13	1,196,778	255	230,951	19,840	522,562	1.058.530
Almonte	11	895,945	297	264,307	18,045	624,954	1,025,415
Manitoba—							
Winnipeg	594	71,757,177	16.673	18,060.555	1,378,202	40,822,725	73,316,055
St. Boniface	44	11,201,802	1,613	1,974,092	223,682	16,936,517	22,404,098
Transcona	3	6,564,523	1,679	2,030.018	195,705	3,248,392	5.630.450
Portage la Prairie	8	586,225	133	115.491	30,071	1,235,505	1,651.432
Selkirk	8	1,880,669	355	447,881	149,693	684,939	1,578,039
Saskatchewan—							
Moose Jaw	41	14,505,346	953	1,097,477	285,753	10,683,193	14,148,709
Saskatoon	66	7,205,826	1,192	1,384,922	219,900	7,617,655	11,789,474
Regina	95	9,709,925	1,676	1,983,521	318,592	6,728,114	10,511,760
Prince Albert	19	1,934,997	398	420,476	61,051	2,326,401	3,049,849
Alberta—							
Calgary	161	27,497,248	4,137	4,720,763	527,879	17,596,497	27,087,121
Edmonton	168	17,489,116	4,018	4,429,784	299,392	15,408,120	23,262,664
Medicine Hat	19	5,349,534	457	486,521	54,431	3,929,715	5,403,057
Lethbridge	26	1,730,726	323	398,549	41,301	1,269,702	2,767,240
British Columbia—							
Vancouver	807	83,199,508	16,397	18,479,302	1,212,690	47,394.136	87,581,068
New Westminster	78	11,628,413	2,385	2,563,933	229,261	8,318,142	14,491,671
Victoria	126	8,922,241	1,940	2,279,217	179,022	2,884,874	6,844,619
North Vancouver	22	4,296,930	607	711,556	77,790	1,642.279	3,108.393
Port Alberni	8	1,906,108	371	535,698	2,040	1,034,196	2,166,010
Prince Rupert	17	4,646,165	244	349,877	32,956	1,002,048	1,819,244
Kelowna	22	1,004,471	358	308,650	16,929	630,291	1,194,902
Nelson	23	1,313,917	268	316,287	21,854	507,411	1,125,938
Duncan	8	609,335	426	412,815	3,576	496,809	1,065,133

---

[1] Net value is derived from gross value by deducting costs of materials, fuel, and electricity.

CHAPTER XV.—CONSTRUCTION.

Relation of Construction Industry to General Business Conditions.—The construction and building industry is not only the most widespread in its operation, it is one which expands most rapidly in good times when it attracts great numbers of general and casual workmen—a characteristic which explains the high rate of unemployment from which the industry periodically suffers. Again, apart from the effect of cyclical fluctuations of general business conditions, the construction industry is decidedly seasonal, although new types of construction and mechanical improvements are making it possible to work more steadily on all branches of construction the year round. Conditions in the industry are being transformed as the result of the introduction of new types of construction. Nevertheless, in the winter there is a serious contraction, especially in outside operations, while in the other seasons the contractors employ a much larger number of men, casually engaged, than can be retained throughout the year. A considerable number are in no sense skilled artisans and the supply of unskilled men is generally in excess of the demand.

Activity in construction is of particular interest not only to those engaged in the industry itself but to those concerned with supplying raw materials, such as lumber, steel, cement, paint, glass, and hardware. All of these latter industries are prosperous when the construction industry is active, and depressed when it is at a standstill; again, the effects of their activity and depression are felt throughout the whole field of industry, so that the current conditions in the construction industry react powerfully upon the whole economic life of the nation. Thus, in the period between 1909 and 1913 and that between 1926 and 1929, construction contributed in large measure to produce the 'booms' of those years, as is indicated in the figures of Table **9**.

During the War period the industry was at a low ebb, except for the construction of munition plants, but after the War the housing shortage was a serious problem, and considerable building was undertaken in spite of the high cost of materials and skilled labour, as shown in Table **12**. The urgent requirements due to the practical suspension of the industry during the War were fully met in the post-War years, but the peak of the inflation cycle in 1929 was reflected in the highest value of construction contracts on record. This was followed by successive declines until 1933,* when the industry reached a very low level of activity. There was some recovery in 1934-36 and a further increase of about 37 p.c. in 1937, but a decrease of 16·5 p.c. is shown for 1938. However, a very great deficiency in housing and other forms of construction must still remain from the suspension of activity during the depression years, to be overtaken when confidence is restored in the future stability of prices and the permanence of the recovery. To facilitate and encourage this process, the Dominion Housing Act was passed in 1935.

Dominion Housing Act, 1935.—Prior to August, 1938, loaning facilities to assist in the construction of new homes were provided under the Dominion Housing Act, 1935 (see pp. 473-474 of the 1938 Year Book). More extensive facilities of a similar nature are now provided under Part I of the National Housing Act as described below.

National Housing Act.—Administered by the Department of Finance, the National Housing Act, 1938, has a twofold purpose: (1) to assist in the improvement of housing conditions; and (2) to assist in the absorption of unemployment by the stimulation of the construction and building material industries. The Act is comprised of three separate parts.

---

* October, 1933, marked the lowest point of activity in this industry.

Part I re-enacts the main features of the Dominion Housing Act, 1935, with important amendments designed to encourage the construction of low-cost houses and the extension of lending facilities to the smaller and more remote communities. The Minister is empowered to make advances and pay expenses of administering this Part to the extent of $20,000,000, less advances already made and administrative expenses already incurred under the Dominion Housing Act which amounted to approximately $5,500,000. All loans are made through approved lending institutions. Loans may be for an amount not exceeding 80 p.c. of lending value of the property. Where lending value is $2,500 or less and the house is being built for an owner-occupant, loans may be for an amount not exceeding 90 p.c. of such lending value. The equity of at least 20 p.c. or 10 p.c., respectively, is to be provided by the borrower. Provision is also made for loans ranging between 70 p.c. and 80 p.c. when the lending value exceeds $2,500, and for loans ranging between 50 p.c. and 90 p.c. when the lending value does not exceed $2,500. In order to encourage the extension of the Act to the smaller and more remote communities, and to special areas in the larger centres, the Minister is authorized to guarantee approved lending institutions against loss up to an amount not in excess of 25 p.c. of the total amount of such loans made by each such lending institution. The Minister has entered into contracts with various lending institutions under which guarantees are given running from a minimum of 7 p.c. to a maximum of 25 p.c., based on the total amounts and classes of loans made by the lending institutions. The interest rate paid by the borrower on all loans made under Part I is 5 p.c. This is made possible by the fact that the Government advances one-quarter of the total mortgage money on an interest basis of 3 p.c. Loans are made for a period of 10 years subject to renewal for a further period of 10 years upon revaluation of the security and on conditions satisfactory to all parties concerned. Interest, principal, and taxes are payable in monthly instalments. Amortization of principal over 20 years is provided for, but more rapid amortization may be arranged to suit the borrower. Sound standards of construction are required.

The results of operation under the Dominion Housing Act (October, 1935-July, 1938, inclusive), and the National Housing Act to the end of December, 1938, are as follows:—

1.—Loans, Units, and Amounts of Loans Approved under the Dominion Housing Act, 1935, and Part I of the National Housing Act, 1938, by Provinces, calendar years 1935-38.

Province.	Loans.				Family Units Provided.			
	1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	Nil	6	4	5	–	6	4	5
Nova Scotia	"	93	186	139	–	96	186	149
New Brunswick	"	12	48	50	–	12	51	55
Quebec	38	193	303	355	62	413	524	745
Ontario	37	324	604	1,076	37	385	839	2,119
Manitoba	Nil	12	36	110	–	12	36	170
Saskatchewan	"	Nil	2	5	–	–	2	5
Alberta	"	"	Nil	Nil	–	–	–	–
British Columbia	"	10	243	784	–	10	319	890
Totals	**75**	**650**	**1,426**	**2,524**	**99**	**934**	**1,961**	**4,138**

1.—Loans, Units, and Amounts of Loans Approved under the Dominion Housing Act, 1935, and Part I of the National Housing Act, 1938, by Provinces, calendar years 1935-38—concluded.

Province.	Amounts.				Totals, 1935-38.		
	1935.	1936.	1937.	1938.	Loans.	Units.	Amount.
	$	$	$	$	No.	No.	$
Prince Edward Island....	Nil	32,364	21,670	26,000	15	15	80,034
Nova Scotia.............	"	421,437	837,692	571,831	418	431	1,830,960
New Brunswick..........	"	45,179	219,188	240,750	110	118	505,117
Quebec..................	326,614	1,906,780	2,348,514	2,939,553	889	1,744	7,521,461
Ontario..................	198,456	1,907,289	3,434,833	7,376,842	2,041	3,380	12,917,420
Manitoba................	Nil	100,564	207,750	606,539	158	218	914,853
Saskatchewan............	"	Nil	8,200	16.800	7	7	25,000
Alberta..................	"	"	Nil	Nil	Nil	Nil	Nil
British Columbia........	"	31,175	988,348	2,863,634	1,037	1,219	3,883,157
Totals..........	**525,070**	**4,444,788**	**8,066,195**	**14,641,949**	**4,675**	**7,132**	**27,678,002**

Part II of the National Housing Act is designed to assist local housing authorities, including limited dividend housing corporations, to provide decent, safe, and sanitary housing to be rented to families of low income who cannot afford the "economic rental" for such accommodation which is $9\frac{1}{2}$ p.c. of the cost of construction plus the taxes which would ordinarily be levied on the property by the municipality. The Dominion is authorized to make first mortgage loans to local housing authorities up to a maximum amount of $30,000,000, but loans to any one municipality must not exceed the proportion of $30,000,000 which the population of the municipality bears to the total urban population of Canada, based on the 1931 Census. Loans of 80 p.c. of the cost of construction (including cost of land, building, architectural and legal expenses, and any other expenses necessary to complete the project), but not exceeding $2,400 per family unit, may be made to limited dividend housing corporations organized to construct, hold, and manage houses built as a low-rental housing project, and dividends on the shares of which are limited to 5 p.c. annually. Loans of 90 p.c. of the cost of construction, and not exceeding $2,700 per family unit, may be made to other local housing authorities. Interest is at $1\frac{3}{4}$ p.c. in the case of limited dividend corporations, and 2 p.c. for other local housing authorities. Payments are made half-yearly covering principal and interest so as to amortize the loan in approximately 35 years. The municipality must agree not to levy taxes in excess of 1 p.c. of the cost of construction. Loans to local authorities other than limited dividend housing corporations are to be guaranteed as to principal and interest by the government of the province concerned.

Part III authorizes the Minister of Finance to pay the municipal taxes (including general real estate tax and school taxes but excluding special taxes and local improvement charges) levied on a house costing $4,000 or less, the construction of which begins between June 1, 1938, and Dec. 31, 1940, as follows: 100 p.c. of such taxes for the first year in which the house is taxed; 50 p.c. for the second year; and 25 p.c. for the third year. The chief conditions to be complied with are: (1) the municipality in which the house is erected, if it owns lots suitable for residential purposes, must make a satisfactory offer to sell a reasonable number of such lots at not more than $50 per lot, or at not more than the lowest price at which the municipality may sell such lots, to persons who agree to begin the construction of houses for their own occupation within one year from the respective dates of purchase Any new house is eligible for tax assistance, and not only houses built on lots sold by the municipality; (2) the cost of construction of the house including land, building, architectural and legal expenses, must not exceed $4,000; (3) finally, the house must be a single-family house, built for a person for his own occupation.

The Government Home Improvement Plan.—Although operative, by agreement between the Dominion Government and lending institutions, since Nov. 1, 1936, the Home Improvement Plan derives its legislative sanction from "An Act to Increase Employment by Encouraging the Repair of Rural and Urban Homes", assented to on Mar. 31, 1937. The object of the legislation is clearly indicated in its title. The method adopted is to stimulate the advance of money for home repair and improvement by a government guarantee up to 15 p.c. of the aggregate amount loaned under the Plan by each approved lending institution.

The Plan, which is administered by the Department of Finance, was first sponsored by the National Employment Commission, and the Commission, at the request of the Government, undertook to advance it by all possible methods. Voluntary co-operative committees, provincial and local, were set up in every province. Through the co-operation of Canadian industry, an extensive publicity and advertising campaign was initiated and carried on without cost to the Government. Explanatory booklets and leaflets in both languages were distributed extensively throughout the Dominion, speeches and radio broadcasts were utilized, and in a number of cities, home improvement exhibitions designed to emphasize the desirability of house repair and modernization were held. From time to time statements indicating the increase in loan totals were issued by the Department of Finance.

The Plan provides for the making of loans by chartered banks and other approved lending institutions to owners of residential property (including farm buildings) for repairs, alterations, and additions (including built-in equipment) to urban and rural dwellings. Loans may be made up to a maximum of $2,000 on any single-family house. In the case of a multiple-family dwelling the maximum amount which can be borrowed is $1,000, plus $1,000 for each family unit provided for in the building when the repairs or improvements are completed. The limit of time allowed for the payment of a Home Improvement loan is three years for a loan of $1,000 or less, and five years for a loan exceeding $1,000. Payment may be made in equal monthly instalments or in such other instalments as are adapted to the financial circumstances of the borrower. The maximum charge must not exceed a rate of discount of 3¼ p.c. for a one-year loan, repayable in equal monthly instalments. This is equivalent to an effective interest rate of 6·32 p.c.

The limit of the aggregate loans is $50,000,000 and the limit of the Government's guarantee is therefore $7,500,000.

Loans made under the Government Home Improvement Plan to the end of 1938, by provinces, were as follows:—

2.—Loans made under the Government Home Improvement Plan, by Provinces, 1936-38.

Province.	Numbers.			Amounts.		
	1936.	1937.	1938.	1936.	1937.	1938.
				$	$	$
Prince Edward Island	31	375	203	10,837	100,943	48,425
Nova Scotia	328	2,533	1,972	102,362	786,789	570.747
New Brunswick	179	1,223	986	56,565	421,672	321,042
Quebec	518	4,531	4,388	266,463	2,245,178	2,243,932
Ontario	1,153	13,728	13,684	415,054	5,403,473	5,848,524
Manitoba	131	2,070	1,616	50,238	784,302	628,852
Saskatchewan	91	796	397	28,796	279,098	127,996
Alberta	281	2,319	2,048	121,863	994,133	898,354
British Columbia	447	3,197	2,783	146,075	1,036,285	828,551
Totals	**3,159**	**30,772**	**28,077**	**1,198,253**	**12,051,873**	**11,516,423**

Section 1.—The Annual Census of Construction.

The annual Census of Construction undertaken by the Dominion Bureau of Statistics covers all construction, maintenance and repair work undertaken by contractors, builders, and public bodies throughout Canada but does not include maintenance and repair work on steam and electric railways, telegraph and telephone systems and the lesser public utilities when such work is done by the employees of these concerns in the ordinary way. Nor can it include a substantial amount of construction in the aggregate done by farmers and other individuals performing work on their own structures who might be otherwise unemployed. It is doubtful whether a great deal of the work of railways and utilities is construction in the sense understood in the census: for instance, the routine "maintenance of way" expenditures, so far as they relate to inspection work, are not construction, although so far as they concern re-building of line for road bed or structures they might be said to fall in that category.

The following statement gives an idea of the volume of such work carried on by steam and electric railways alone. If only one-fifth of this is taken as applicable to construction proper, then the figure for 1937 to be added to the census figures given later on would be about $27,500,000, but, as pointed out, there are also telegraph and telephone systems as well as other utilities, and farmers and others working on own account to consider. The reader will therefore appreciate the limitations of the census figures given in Tables **3-6**, as indicating, as explained, construction, maintenance, and repair work undertaken by contractors only.

EXPENDITURES BY STEAM AND ELECTRIC RAILWAYS ON MAINTENANCE OF WAY AND STRUCTURES, AND MAINTENANCE OF EQUIPMENT, 1934-37.

Item.	1934.	1935.	1936.	1937.
	$	$	$	$
Steam Railways—				
Maintenance of way and structures	53,502,807	55,250,291	60,378,275	58,309,150
Maintenance of equipment	54,004,990	57,424,660	63,755,028	73,166,522
Totals	107,507,797	112,674,951	124,133,303	131,475,672
Electric Railways—				
Maintenance of way and structures	2,486,521	2,435,644	2,654,875	2,561,156
Maintenance of equipment	2,889,868	2,966,127	3,179,552	3,276,960
Totals	5,376,389	5,401,771	5,834,427	5,838,116
Grand Totals	112,884,186	118,076,722	129,967,730	137,313,788

Further, no relationship exists between the total value of construction as shown below, and the value of contracts awarded as indicated in Table 9 of Section 2, p. 451. In the latter case all values are included as soon as awards are made irrespective of whether the contract is completed or even begun in that year, whereas the tables below cover construction work carried on and actually performed in the calendar year.

Industrial Statistics of Construction.*—A census of construction was made by the Dominion Bureau of Statistics for 1934, but the basis of compilation was not standardized until 1935 so that with the completion of the 1937 figures comparable statistics are now available covering the years 1935-37. In Table 3, principal statistics of the construction industry are summarized for the three years.

---

* Revised by F. I. Tanner, Chief, Construction Statistics Branch, Dominion Bureau of Statistics.

3.—Principal Statistics of the Construction Industry in Canada, 1935-37.

Item.		1935.	1936.	1937.
Firms reporting	No.	7,689	9,976	10,855
Capital invested	$	158,471,916	164,322,276	176,971,223
Salaried employees	No.	18,670	21,059	22,431
Salaries paid	$	22,579,526	25,270,846	30,398,287
Wage-earning employees (average)	No.	126,098	121,285	129,221
Wages paid	$	82,607,097	87,575,538	120,239,004
Totals, employees	No.	144,768	142,344	151,652
Totals, salaries and wages paid	$	105,186,623	112,846,384	150,637,291
Cost of materials used	$	94,733,584	122,189,238	175,844,435
Value of work performed[1]	$	215,548,873	258,040,400	351,874,114
New construction[1]	$	140,988,228	170,645,824	244,946,916
Alterations, maintenance, and repairs[1]	$	74,560,645	87,394,576	106,927,198
Subcontract work performed	$	*31,437,070*	*35,710,083*	*46,975,118*
New construction	$	*22,813,416*	*29,979,166*	*40,025,508*
Alterations, maintenance, and repair	$	*8,623,854*	*5,730,917*	*6,949,610*

[1] Including subcontract work indicated in the lower part of the table.

Table 4 shows the principal statistics of the industry, divided as between public and private employers.

4.—Principal Statistics of the Construction Industry in Canada, by Provinces, 1937.

NOTE.—Comparable figures for 1935 and 1936 are given in the corresponding table of the 1937 and 1938 Year Books.

Group or Province.	Capital Invested.	Employees.	Salaries and Wages.	Cost of Materials.	Values of Work Performed.		
					New Construction.	Alterations and Repairs.	Total.
	$	No.	$	$	$	$	$
GROUP.							
Contractors, builders, etc.	143,347,454	96,865	107,456,466	151,804,667	205,335,133	72,873,918	278,209,051
Municipalities	16,388,378	15,428	12,980,547	5,965,292	6,976,348	13,151,975	20,128,323
Harbour Commissions	1,407,662	804	921,671	311,451	410,574	1,206,375	1,616,949
Provincial Govt. Depts.	10,233,292	34,430	25,247,393	15,472,069	29,878,709	15,556,617	45,435,326
Dominion Govt. Depts.	5,594,437	4,125	4,031,214	2,290,956	2,346,152	4,138,313	6,484,465
Totals	**176,971,223**	**151,652**	**150,637,291**	**175,844,435**	**244,946,916**	**106,927,198**	**351,874,114**
PROVINCE.							
Prince Edward Island	178,289	382	314,202	378,393	458,164	296,284	754,448
Nova Scotia	7,386,699	11,409	8,509,950	8,185,301	13,679,735	6,500,669	20,180,404
New Brunswick	7,602,593	7,136	6,246,052	7,946,649	14,368,253	3,188,893	17,557,146
Quebec	53,622,840	46,968	49,173,637	49,996,729	71,868,403	29,592,328	101,460,731
Ontario	78,865,856	57,859	59,868,331	76,849,906	103,493,863	44,858,464	148,352,327
Manitoba	6,374,592	5,249	5,337,598	6,720,247	6,773,032	5,702,294	12,475,326
Saskatchewan	3,699,968	5,660	3,405,373	3,462,655	4,779,859	3,656,636	8,436,495
Alberta	4,900,479	4,735	4,970,730	5,153,609	5,834,324	5,364,570	11,198,894
British Columbia and Yukon	14,339,907	12,254	12,811,418	17,150,946	23,691,283	7,767,060	31,458,343

The percentage distribution, by provinces, is as follows:—

5.—Percentage Distribution of the Principal Statistics of the Construction Industry, by Provinces, 1937.

NOTE.—Comparable figures for 1935 and 1936 are given in the corresponding table of the 1937 and 1938 Year Books.

Province.	Capital Invested.	Employees.	Salaries and Wages.	Cost of Materials.	Value of Work Performed.
	p.c.	p.c.	p.c.	p.c.	p.c.
Prince Edward Island	0·1	0·3	0·2	0·2	0·2
Nova Scotia	4·2	7·5	5·7	4·7	5·7
New Brunswick	4·3	4·7	4·2	4·5	5·0
Quebec	30·3	31·0	32·6	28·4	28·8
Ontario	44·6	38·1	39·7	43·7	42·2
Manitoba	3·6	3·5	3·5	3·8	3·6
Saskatchewan	2·1	3·7	2·3	2·0	2·4
Alberta	2·7	3·1	3·3	2·9	3·2
British Columbia and Yukon	8·1	8·1	8·5	9·8	8·9
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

Table 6 classifies the various types of construction carried out in 1937. The item "trade construction" covers such items as brick laying, carpentry, plumbing, heating, electrical work, etc., reported by contractors who confine themselves to a specific type of work. Details by provinces and more complete information on the industry than it is possible to include in the limited space available here, will be found in the Bureau's report on the construction industry for 1937.

6.—Description, Classification, and Value of Construction in Canada, 1937.

NOTE.—Comparable figures for 1935 and 1936 are given in the corresponding table of the 1937 and 1938 Year Books.

Item.	New Construction.	Repairs, Alterations, and Maintenance.	Total Value.
	$	$	$
Building Construction—			
Dwellings and apartments	32,030,118	8,645,499	40,675,617
Hotels, clubs, and restaurants	2,179,080	994,930	3,174,010
Churches, hospitals, etc	10,600,143	2,990,258	13,590,401
Office buildings, stores, and theatres	10,951,754	6,992,023	17,943,777
Grain elevators, factories, warehouses, farm and mine buildings	32,847,221	12,560,344	45,407,565
Garages and service stations	2,854,234	1,514,781	4,369,015
Government and municipal buildings	Nil	Nil	Nil
All other building construction	2,766,881	2,611,732	5,378,613
Totals, Building Construction	**94,229,431**	**36,309,567**	**130,538,998**
Street, Highway, Power, Water, etc., Construction—			
Streets, highways, and parks	70,662,871	25,142,811	95,805,682
Bridges, culverts, subways, etc	13,440,437	1,993,578	15,434,015
Water, sewage and drainage systems	5,629,768	3,404,325	9,034,093
Electric power plants, including dams, reservoirs, transmission lines, and underground conduit	21,720,378	5,026,525	26,746,903
Railway construction, steam and electric	2,451,397	428,062	2,879,459
All other construction	7,414,850	1,346,076	8,760,926
Totals, Street, etc., Construction	**121,319,701**	**37,341,377**	**158,661,078**
Harbour and River Construction	**9,353,508**	**5,304,764**	**14,658,272**
Trade Construction	**20,044,276**	**27,971,490**	**48,015,766**
Grand Totals	**244,946,916**	**106,927,198**	**351,874,114**

Tables 7 and 8 show the employment and wage-earnings for the construction industry. The employment figures, shown on a monthly basis, reflect the fact that, while the industry is seasonal in nature, it is not as decidedly so as is sometimes thought; this is noted especially when the statistics for the period 1935-37 are studied. The month of highest employment in the industry as a whole, in 1937, was September with 194,211 wage-earners and the lowest was February with 58,046.

7.—Average Monthly Employment of Wage-Earners and their Remuneration, by Groups and Months, 1937.

Note.—Comparable figures for 1935 and 1936 are given in the corresponding table of the 1937 and 1938 Year Books.

Item.	General and Trade Contractors and Sub-contractors.	Municipalities.	Harbour Commissions.	Provincial Government Departments.	Dominion Government Departments.	Total.
	No.	No.	No.	No.	No.	No.
January	37,760	9,996	526	12,986	1,887	63,155
February	37,639	10,151	513	8,002	1,741	58.046
March	42,628	10,714	623	10,342	2,077	66,384
April	55,018	12,343	835	23,064	2,076	93,336
May	78,097	13,615	681	32,734	2,925	128,052
June	97,581	15,772	695	45,952	4,528	164,528
July	108,955	16,170	789	47,628	5,111	178,653
August	114,435	17,069	747	53,858	5,432	191,541
September	117,460	17,355	708	53,200	5,488	194,211
October	111,397	15,923	703	46,835	5,391	180,249
November	90,795	14,535	646	27,303	4,028	137,307
December	66,184	13,011	569	12,850	2,571	95,185
Monthly Averages of Wage-Earners Employed	79,829	13,888	670	31,229	3,605	129,221
	$	$	$	$	$	$
Totals, Wages Paid during Year	83,989,582	10,834,798	672,761	21,248,590	3,493,273	120,239,004
Averages, Wages per Man per Annum	1,052	780	1,004	680	969	930

8.—Summary of Average Wage-Earners Employed, Total Wages Paid, and Average Wages per Man, by Provinces, 1937.

Province.	Monthly Average of Wage-Earners Employed.	Total Wages Paid During Year.	Average Wages per Man per Annum.
	No.	$	$
Prince Edward Island	337	260,928	774
Nova Scotia	10,468	7,380,538	705
New Brunswick	6,550	5,285,469	807
Quebec	41,021	41,055,523	1,001
Ontario	47,908	45,631,402	952
Manitoba	4,130	3,932,003	952
Saskatchewan	4,995	2,657,589	532
Alberta	3,909	3,973.081	1,016
British Columbia and Yukon	9,903	10,062,471	1,016

Section 2.—Contracts Awarded and Building Permits.

In this section barometric statistics are given of work actually in sight as contracts awarded and building permits. These figures are related to the figures of work performed during the year only so far as the work thus provided for is completed and duly reported in the Census of Construction. Further, values of contracts awarded, and especially of building permits, are estimates (more often under-estimates) of work to be done. Obviously, these statistics and those of Section 1, cannot be expected to agree, since much work contracted for towards the end of any one year is often not commenced until the next and, especially as regards big contracts, extends into more than one year. The figures here given are, therefore, supplementary to those of Section 1 and are valuable as showing from year to year the work immediately contemplated during the period.

A record of contracts awarded during the years 1911-38, as compiled by MacLean Building Reports, Ltd., is given in Table **9**. The aggregate for 1938 was less by 16·4 p.c. than the 1937 figure. Table **10** shows, in some detail, the value of the construction contracts awarded in the latest six years.

Engineering contracts accounted for 28·2 p.c. of the total value of the contracts awarded in 1938, residential buildings for 29·4 p.c., industrial buildings for 8·5 p.c., and business buildings for 33·9 p.c. As compared with 1937, residential building showed a decrease of 2·1 p.c. in value, engineering projects of 32·7 p.c., industrial construction of 52·7 p.c., while business construction increased to the extent of 14·5 p.c.

9.—Summary of the Value of Construction Contracts Awarded in Canada, 1911-38.
(From MacLean Building Reports, Ltd.)

Year.	Value of Construction Contracts.	Year.	Value of Construction Contracts.	Year.	Value of Construction Contracts.
	$		$		$
1911	345,425,000	1921	240,133,300	1930	456,999,600
1912	463,083,000	1922	331,843,800	1931	315,482,000
1913	384,157,000	1923	314,254,300	1932	132,872,400
1914	241,952,000	1924	276,261,100	1933	97,289,800
1915	83,916,000	1925	297,973,000	1934	125,811,500
1916	99,311,000	1926	372,947,900	1935	160,305,000
1917	84,841,000	1927	418,951,600	1936	162,588,000
1918	99,842,000	1928	472,032,600	1937	224,056,700
1919	190,028,000	1929	576,651,800	1938	187,277,900
1920	255,605,000				

10.—Construction Contracts Awarded in Canada, by Provinces and Types of Construction, 1933-38.
(From MacLean Building Reports, Ltd.)

Item.	1933.	1934.	1935.	1936.	1937.	1938.
PROVINCE.	$	$	$	$	$	$
Prince Edward Island	386,900	384,600	414,800	339,900	459,000	1,781,400
Nova Scotia	2,880,800	4,993,700	7,903,400	8,073,800	11,220,000	10,537,600
New Brunswick	3,951,000	4,590,300	6,055,300	9,495,100	9,878,200	7,203,800
Quebec	32,539,200	34,135,500	44,471,900	45,749,500	71,940,800	65,778,900
Ontario	42,573,400	63,358,300	70,872,800	72,393,300	97,777,400	73,070,100
Manitoba	2,138,000	3,905,000	8,744,400	6,994,400	7,945,100	6,115,200
Saskatchewan	775,200	1,563,200	3,841,300	2,200,600	6,704,900	3,969,000
Alberta	2,825,900	3,489,400	5,893,000	6,297,400	4,901,000	8,180,000
British Columbia	9,219,400	9,391,500	12,108,100	11,044,000	13,230,300	10,641,900
Totals	**97,289,800**	**125,811,500**	**160,305,000**	**162,588,000**	**224,056,700**	**187,277,900**

10.—Construction Contracts Awarded in Canada, by Provinces and Types of Construction, 1933-38—concluded.

Item.	1933.	1934.	1935.	1936.	1937.	1938.
Type of Construction.	$	$	$	$	$	$
Apartments	903,900	1,641,900	3,249,600	3,921,100	5,815,100	7,807,900
Residences	23,025,900	28,946,200	33,158,900	38,936,800	50,391,900	47,217,700
Totals, Residential	**23,929,800**	**30,588,100**	**36,408,500**	**42,857,900**	**56,207,000**	**55,025,600**
Churches	2,052,100	1,827,900	1,698,400	2,625,300	2,662,100	4,440,100
Public garages	1,881,400	2,280,300	2,267,600	2,746,100	4,429,800	3,418,100
Hospitals	1,879,100	4,977,900	2,979,900	2,127,800	7,425,100	7,027,600
Hotels and clubs	1,294,900	1,756,000	2,312,000	2,031,500	2,715,100	2,899,600
Office buildings	1,096,100	3,989,300	1,687,900	3,149,000	5,911,600	5,076,900
Public buildings	2,784,500	7,012,800	20,243,500	7,126,200	8,066,200	13,118,600
Schools	5,391,100	6,161,900	5,429,200	4,133,600	6,378,600	11,141,600
Stores	3,629,900	4,127,000	4,374,300	6,625,400	7,315,100	10,069,800
Theatres	483,000	633,600	1,429,600	2,516,000	2,397,600	1,867,100
Warehouses	5,784,400	4,713,600	6,019,800	4,690,100	7,987,600	4,267,700
Totals, Business	**26,276,500**	**37,480,300**	**48,442,200**	**37,771,000**	**55,288,800**	**63,327,100**
Totals, Industrial	**9,101,900**	**8,037,900**	**10,292,200**	**14,973,700**	**33,779,800**	**15,982,200**
Bridges	6,315,900	5,329,800	3,362,200	7,751,200	7,584,800	4,273,100
Dams and wharves	627,500	2,932,800	8,557,800	3,119,400	4,374,800	5,285,800
Sewers and water-mains	5,577,400	3,873,000	3,715,000	2,515,800	2,946,000	3,428,500
Roads and streets	16,509,700	24,432,400	27,421,300	23,649,200	35,840,100	16,732,600
General engineering	8,951,100	13,137,200	22,105,800	29,949,800	28,035,300	23,223,000
Totals, Engineering	**37,981,600**	**49,705,200**	**65,162,100**	**66,985,400**	**78,781,100**	**52,943,000**
Grand Totals	**97,289,800**	**125,811,500**	**160,305,000**	**162,588,000**	**224,056,700**	**187,277,900**

Building Permits.—The estimated value of construction in 58 cities of Canada, as indicated by their building permits, is shown for the years 1933 to 1938, inclusive, in Table **11**. These cities had in 1931 about 36 p.c. of the population of Canada while their 1938 building permits aggregated $60,817,332 or 32·5 p.c. of the total contracts awarded, as shown in Table **9**. In Table **11**, the 35 cities for which statistics of building permits are available since 1910 are indicated by an asterisk (*), and the totals for these cities are given beneath the totals for the wider group.

Owing to the increasing use of the automobile and other means of rapid transportation, a growing percentage of those who work in the cities reside outside the municipal boundaries. Hence arises, in part, the necessity for an extension of the record of building permits to include such suburban areas as the York Townships in the case of Toronto, and North Vancouver in the case of Vancouver. South Vancouver and Point Grey were annexed to Vancouver as from Jan. 1, 1929.

The construction contracts in 1938 as shown in Table **10** declined by 16·4 p.c. compared with 1937, but the building permits of 58 cities in Table **11** increased by 8·9 p.c. In connection with this comparison, it may be noted that the contracts awarded for residential building declined by only 2·1 p.c. in 1938, while there was an increase of 14·5 p.c. in the value of the business buildings for which construction contracts were let. These classes figure prominently in the building authorizations of the cities.

11.—Values of Building Permits Taken Out in 58 Cities, calendar years 1933-38.

NOTE.—Asterisks indicate the 35 original cities, statistics for which are available since 1910.

Province and City.	1933.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$	$
Prince Edward Island	**115,200**	**87,310**	**168,395**	**154,455**	**140,170**	**92,210**
Charlottetown	115,200	87,310	168,395	154,455	140,170	92,210
Nova Scotia	**655,294**	**835,672**	**1,619,097**	**1,320,202**	**1,929,025**	**1,897,641**
*Halifax	598,909	749,428	1,545,824	1,103,988	1,488,326	1,420,142
New Glasgow	23,060	11,252	18,855	36,818	86,135	81,415
*Sydney	33,325	74,992	54,418	179,396	354,564	396,084
New Brunswick	**394,514**	**1,277,333**	**265,115**	**453,756**	**602,163**	**631,966**
Fredericton	85,115	42,775	19,325	142,220	126,400	118,230
*Moncton	143,093	978,228	106,261	100,292	214,608	280,202
*Saint John	166,306	256,330	139,529	211,244	261,155	233,534
Quebec	**7,005,774**	**5,994,676**	**10,207,383**	**10,011,608**	**11,271,918**	**14,451,635**
*Maisonneuve *Montreal	5,648,862	4,098,025	7,455,436	6,905,323	8,217,344	10,205,422
*Quebec	724,548	415,308	2,141,695	816,835	915,119	1,945,961
Shawinigan Falls	58,260	184,535	52,137	126,175	414,080	264,910
*Sherbrooke	186,400	130,060	314,450	278,700	792,240	750,700
*Three Rivers	28,588	465,765	55,555	1,528,197	383,417	769,565
*Westmount	359,116	700,983	188,110	356,378	549,718	515,077
Ontario	**9,116,743**	**14,351,380**	**23,847,536**	**19,256,177**	**28,156,707**	**25,424,507**
Belleville	29,700	76,455	145,602	85,065	150,395	119,340
*Brantford	171,783	283,586	272,648	161,602	270,003	273,563
Chatham	88,720	55,200	108,931	156,345	192,050	471,156
*Fort William	213,400	621,700	152,450	207,500	495,880	542,553
Galt	101,256	135,006	388,688	141,226	369,458	286,730
*Guelph	108,665	110,078	273,608	100,200	138,267	152,778
*Hamilton	510,200	772,535	1,887,622	1,466,906	1,694,189	2,325,908
*Kingston	179,667	141,398	213,929	253,398	360,629	392,733
*Kitchener	140,233	234,449	589,325	449,123	891,247	615,092
*London	551,485	671,840	1,835,110	672,745	949,790	708,140
Niagara Falls	43,445	73,540	92,057	141,258	246,436	326,919
Oshawa	49,035	50,970	125,300	108,022	218,760	103,085
*Ottawa	916,065	1,257,000	4,085,140	1,781,555	2,325,445	5,188,059
Owen Sound	38,875	23,885	48,727	173,410	56,847	176,961
*Peterborough	133,900	149,238	195,588	269,164	199,686	426,144
*Port Arthur	114,815	101,807	163,971	212,671	708,143	747,444
Riverside	6,000	3,100	11,475	29,810	109,605	99,330
*Stratford	71,662	53,095	50,227	53,105	145,047	75,687
*St. Catharines	115,356	151,648	238,694	823,398	793,227	367,405
*St. Thomas	64,863	42,261	128,350	79,545	52,106	189,296
Sarnia	63,847	127,203	137,052	123,229	192,830	173,752
Sault Ste. Marie	93,377	257,340	131,320	226,340	355,950	343,345
*Toronto	4,415,510	7,496,983	10,005,455	8,182,799	11,258,900	8,535,401
Welland	46,286	108,326	74,609	107,645	231,429	146,663
*Windsor	76,842	385,352	709,304	703,970	3,524,699	970,948
Woodstock	72,915	67,593	102,223	206,321	214,065	129,355
York Townships	698,841	899,792	1,680,131	2,339,825	2,011,624	1,536,720
Manitoba	**851,681**	**833,048**	**2,945,175**	**1,559,940**	**2,543,559**	**3,073,175**
*Brandon	46,821	44,758	111,235	55,211	57,310	50,085
St. Boniface	62,660	80,640	110,540	97,279	334,149	1,037,190
*Winnipeg	742,200	707,650	2,723,400	1,407,450	2,152,100	1,985,900
Saskatchewan	**529,497**	**722,108**	**1,029,854**	**640,739**	**905,029**	**972,707**
*Moose Jaw	44,845	350,687	252,260	57,818	191,087	46,042
*Regina	376,742	291,696	632,944	358,966	464,041	477,780
*Saskatoon	107,910	79,725	144,650	223,955	249,901	448,885

11.—Values of Building Permits Taken Out in 58 Cities, calendar years 1933-38—concluded.

Province and City.	1933.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$	$
Alberta	**947,240**	**1,262,407**	**1,686,457**	**1,966,556**	**1,828,377**	**3,930,553**
*Calgary	449,917	687,094	874,286	845,287	667,809	911,311
*Edmonton	428,565	479,108	676,535	895,440	865,560	2,806,340
Lethbridge	54,398	70,110	118,442	200,414	232,298	203,117
Medicine Hat	14,360	26,095	17,194	25,415	62,710	9,785
British Columbia	**2,160,553**	**2,093,590**	**4,791,611**	**5,962,260**	**8,468,051**	**10,342,938**
Kamloops	50,517	34,201	69,652	78,735	58,277	67,872
Nanaimo	33,356	49,841	36,856	166,378	231,602	110,895
*New Westminster	114,880	77,695	210,490	369,215	541,715	690,182
North Vancouver	27,796	14,505	20,250	57,929	68,188	111,485
Prince Rupert	29,327	66,420	43,235	63,940	46,694	274,086
*Vancouver	1,564,541	1,418,816	3,892,665	4,641,545	6,760,880	8,224,300
*Victoria	340,136	432,112	518,463	584,518	760,695	864,118
Totals—58 Cities	**21,776,496**	**27,457,524**	**46,560,623**	**41,325,693**	**55,844,999**	**60,817,332**
***Totals—35 Cities**	**19,890,150**	**24,911,430**	**42,839,627**	**36,337,439**	**49,694,847**	**54,532,781**

Table 12 shows the values of the building permits issued by 35 cities in the years 1910-38. The average weighted index numbers of wholesale prices of building materials since 1912 are given, together with index numbers of employment in the construction industries as reported by employers since 1920, both these indexes having been compiled by the Dominion Bureau of Statistics. The average index numbers of wages in the building trades since 1910, as compiled by the Department of Labour, are also given. These indexes show as far as possible the fluctuations in building costs with their effect upon construction work and employment. At various times attempts have been made to determine the relative proportions of material and wage costs in general building; such proportions vary with the type of building and the centres studied, and accurate and representative data are difficult to obtain. However, the results of a survey made in 1934 and published in "Building in Canada" (June, 1934) showed that in fifteen cities the average proportions in all types of construction were 63·6 p.c. for materials and 36·4 p.c. for labour. The reduction in the cost of building operations in the depression years has probably been much more than is indicated by the declines in the indexes of wholesale prices and wages from the relatively high averages shown since the Great War.

12.—Values of Building Permits Issued by 35 Cities and Index Numbers of the Building Construction Industries, calendar years 1910-38.

Year.	Value of Building Permits.	Average Index Numbers of—		
		Wholesale Prices of Building Materials.	Wages in the Building Trades.	Employment in Building Construction.[1]
	$	(1913=100.)		(1926=100.)
1910	100,357,546	[2]	86·9	[2]
1911	138,170,390	[2]	90·2	[2]
1912	185,233,449	[2]	96·0	[2]
1913	153,662,842	100·0	100·0	[2]
1914	96,780,981	93·8	100·8	[2]

---

[1] As reported by employers. [2] Not available.

12.—Values of Building Permits Issued by 35 Cities and Index Numbers of the Building Construction Industries, calendar years 1910-38—concluded.

Year.	Value of Building Permits.	Average Index Numbers of—		
		Wholesale Prices of Building Materials.	Wages in the Building Trades.	Employment in Building Construction.[1]
		(1913=100.)		(1926=100.)
1915	33,566,749	90·3	101·5	[2]
1916	39,724,466	103·8	102·4	[2]
1917	33,936,426	130·7	109·9	[2]
1918	36,838,270	150·5	125·9	[2]
1919	77,113,413	175·0	148·2	[2]
1920	106,054,379	214·9	180·9	[2]
1921	100,797,355	183·2	170·5	62·1
1922	129,338,017	162·2	162·5	60·0
1923	117,243,806	167·0	166·4	66·4
1924	113,329,707	159·1	169·1	71·2
1925	110,314,698	153·5	170·4	75·8
1926	143,052,669	149·2	172·1	100·0
1927	164,791,231	143·4	179·3	108·7
1928	197,566,322	145·3	185·6	112·0
1929	214,277,386	147·7	197·5	135·3
1930	152,404,222	135·5	203·2	134·3
1931	101,821,221	122·2	195·7	104·3
1932	38,443,406	115·2	178·2	54·1
1933	19,890,150	116·8	158·0	38·5
1934	24,911,430	123·1	154·8	47·8
1935	42,839,627	121·2	159·8	55·4
1936	36,337,439	127·3	160·8	55·4
1937	49,694,847	140·8	165·3	60·1
1938	54,532,781	134·2	169·4	60·1

[1] As reported by employers. [2] Not available.

Employment in Building Construction, and Average Annual Expenditure, 1911-38.—The Dominion Bureau of Statistics makes current surveys of the employment afforded by industrial establishments normally employing 15 persons or over. The index of employment in building construction, calculated upon the 1926 average as 100, from data furnished by some 800 employers, averaged 60·1 in 1938; this was the same as in 1937, while in 1936 the index had been 55·4. The 1937 and 1938 figure was higher than in any other year since 1931.

Over the period 1911-38, inclusive, or since the beginning of MacLean's record of construction contracts awarded as shown in Table 9, p. 451, there has been an average annual per capita expenditure on construction of about $29. The period covered includes, of course, the War years and the depression since 1930, as well as the booms of 1911-13 and 1926-30. This average, consequently, is not unreasonably high. For the present population, the annual total of construction, on the basis of this average, should amount to over $330,000,000. Furthermore, there is undoubtedly an accumulated deficiency in construction from the recent years of subnormal activity. Some idea may be gained, therefore, of the part which the normal functioning of the construction industry might play in the reduction of unemployment.

CHAPTER XVI.—EXTERNAL TRADE.

This chapter commences with a historical sketch of Canadian external trade, the Canadian tariff, and recent developments in external trade, followed by a brief account of the Commercial Intelligence Service. Thereafter is to be found a treatment of statistics of external trade under ten subordinate headings: value and quantum* of world trade (including Canada's position in world trade); historical statistics of Canadian trade; general analysis of current import and export trade; trade with the United Kingdom and the British Empire; trade with the United States and other foreign countries; geographical distribution of Canadian trade by continents and countries; principal commodities imported and exported; trade in raw and manufactured products; main historical tables and tables showing current trends (Tables **1** to **21**); and comparison of the volumes of imports and exports (Table **22**). The chapter is finally brought to a close with sections on the tourist trade of Canada, and on Canada's balance of international payments in recent years.

Section 1.—The Development of Tariffs.

The development of tariffs as affecting Canada is here outlined under two divisions: first, a historical sketch showing phases in the growth of Canadian trade which have influenced tariff development; and second, the present tariff relationships with other countries. Owing to the limitations of space in the Year Book, it is impossible to go into detail with such an intricate matter as tariffs. It has therefore been necessary to adopt the policy of confining any detail regarding commodities and countries to tariff relationships at present in force, and to summarize as much as possible historical data and details of preceding tariffs, giving references where possible to those editions of the Year Book where extended treatments can be found.

Subsection 1.—Historical Sketch of External Trade and Tariffs.

In the early history of the American continent each of the European nations establishing settlements in the New World endeavoured to monopolize the commerce of its colonies, prohibited the ships of other nations from resorting to them and prohibited its colonials from importing European goods from other countries, generally granting them, however, preferential treatment in its own market. In these circumstances the colonial wars in America were carried on, by Governments permeated by the mercantile spirit, for "ships, colonies, and commerce". Owing to this fact, wars resulting in the transfer of colonies from one European power to another involved great economic as well as political changes in the community so transferred. The traders who had previously controlled the trade between the mother country and its colony found their occupations gone, while new traders from the conquering State arrived to take over the import and export trade, which thereafter flowed in new channels, perhaps no more artificial than those which had previously existed.

Throughout the earlier part of the French *régime* in Canada, the foreign trade of the colony was in the hands of the monopolistic chartered companies, of which the Company of One Hundred Associates was the most notable. When its monopoly was cancelled in 1663, the external trade of Canada still remained a preserve of the merchants of Old France. Upon the conquest of the country by the British, the French merchants, who had their offices in Quebec and Montreal, for the most part returned to France, and the trade of the Colony fell into the hands of the traders from England, Scotland, and New England, who had flocked into the country on the heels of the invading armies. Some of their descendants are still among the leading figures in Canadian import and export trade.

---

* The term "quantum" is commonly used in international discussions of trade. For this reason it is retained in the analyses of international trade made here although, in line with the common practice in Canada, "volume" is used in the discussion of Canadian trade in Subsection 10.

For the first sixty years of British rule, Canadian commerce was carried on almost exclusively with or through the United Kingdom, the merchants of New England complaining, after the American Revolution, of being shut out from the Canadian trade. The geographical juxtaposition of the United States to British North America was, however, a factor which could not be permanently ignored, and smuggling became more and more prevalent as settlement extended westward along the International Boundary. In 1822 the United Kingdom made large concessions to United States traders in respect of the Canadian trade. In 1846 she abolished the preferential treatment which she had given to Canadian wheat, and in 1860 all vestige of preference to colonial products disappeared from the British tariff. As a consequence, the colonies which, like Canada, Nova Scotia, and New Brunswick, were by this time enjoying responsible government, could not any longer be refused the right to control their own commercial policy—a fact which was emphasized in an important report prepared in 1859 by the then Minister of Finance, (Sir) A. T. Galt, and forwarded to the British Government. This report declared that the responsibility of the Canadian Government must be to the Canadian people, more especially in matters of taxation (the greater part of the revenue being raised by customs duties), and that the Canadian Government must affirm the right of the Canadian Parliament to adjust the taxation of the people in the way it deemed best, even if this should happen to meet with the disapproval of the British Ministry. This doctrine remained unchallenged by the British Government and, coming at a time when all important parties in the United Kingdom had accepted free trade as a *fait accompli*, it facilitated the setting up in Canada of a protective tariff, designed to secure the establishment in Canada of manufacturing industries, at a time when British opinion desired that the colonies should concentrate their attention on the production of food and raw materials and import from the United Kingdom the manufactured commodities which they required.

The Abolition of Preference and the Reciprocity Treaty of 1854.—The abolition of the British preference on Canadian wheat in 1846 brought about a depression in the flour-milling industry of Montreal and an ephemeral agitation for union with the United States. The effects of the repeal of the preference were, however, mitigated in 1849 by the repeal of the Navigation Acts and the consequent opening of the carrying trade between Canada and the United Kingdom to the shipping of the world. Meanwhile, the abandonment of protection in the Mother Country led to the initiation of negotiations for a reciprocity treaty with the United States. A treaty for the free exchange of natural products between them and the British North American colonies was negotiated in 1854, and became effective on Mar. 16, 1855. From its operation the Canadian farmer and fisherman derived considerable benefit, more especially during the period of the Civil War, when prices in the United States were particularly high. Partly as a consequence of the friction between the United Kingdom and the United States during the Civil War period, and partly because the new Canadian tariff of 1859 shut out the manufactured goods of the United States, the treaty was denounced by the United States at the end of the ten-year period for which it had been negotiated and ceased to operate 12 months later on Mar. 17, 1866. The denunciation of the treaty had a considerable effect in bringing about the confederation of the British North American colonies, which it was hoped would to a great extent consume each other's products.

Tariff Policy since Confederation.—The immediate effect of Confederation was to abolish the tariff barriers which existed between the provinces entering the Dominion. As the area of Canada increased until, except for Newfoundland and Labrador, it became conterminous with British North America, the area of internal free trade was thereby extended, while protection against outside competition was generally maintained. However, the protective tariff of the old Province of Canada, adopted in 1859 with a prevailing rate of 20 p.c., was replaced in 1866 by a tariff assimilated to the revenue tariffs of the Maritime Provinces, with the rates of duties on the great bulk of manufactured commodities reduced from 20 and 25 p.c. to 15 p.c. Later on, the world-wide depression which commenced in 1873, and the consequent falling-off in a revenue based upon trade, necessitated an increase of the general rate to 17½ p.c., with a 20 p.c. rate on certain luxuries. Even this increase failed to fill the treasury.

In 1879, after the people had declared for a protective policy in the general election of 1878, the duties on imported manufactured goods were considerably increased, the rate on goods "not otherwise provided" being raised from 17½ p.c. to 20 p.c., the rates on cotton goods from 17½ p.c. to rates, specific and *ad valorem* equivalent, on the importations of 1881, to 30 p.c., while the duties on woollens were practically doubled. The rate on furniture and clocks was increased to 35 p.c.; on carriages, glassware, wall-paper, and silks, to 30 p.c.; on boots and shoes, buttons, rubber goods, and woodenware, to 25 p.c. Pig iron, previously free, now paid $2 a ton, and the duty on iron billets, bars and rods was increased from 5 p.c. to 10 and 17½ p.c., while manufactured iron and steel products and machinery were given 25 to 35 p.c. protection. Throughout the '80's the general trend of the minor revisions made in the tariff was still upwards, but in the '90's a downward tendency became manifest. In 1891 the duty on raw sugar was repealed, and in 1894 material reductions were made on agricultural implements and minor readjustments on cottons and woollens. This period was also marked by the thorough-going extension of protection to the iron and steel industry, both by customs duties and bounties.

In the tariff revision of 1897, the duties on Indian corn, binder twine, barbed wire, pig iron, flour, and refined sugar were reduced or abolished, while the bounties on domestic pig iron were not reduced but in certain cases increased. But the most distinctive feature of the tariff revision of 1897 was the adoption of what was called a "reciprocal" tariff, one-eighth lower than the general. This reciprocal tariff was at once applied to the United Kingdom, and afterwards to New South Wales and to British India. Belgium and Germany, in virtue of their trade treaties with the United Kingdom, were also admitted to the benefits of the reciprocal tariff, together with Argentina, Austria-Hungary, Bolivia, Colombia, Denmark, Persia, Russia, Sweden, Switzerland, Tunisia, and Venezuela, on account of most-favoured-nation treaties between these countries and the United Kingdom, also France and her colonies, in consequence of the Franco-Canadian treaty of 1893. A little later the reciprocal tariff was also extended to the Netherlands, Japan, Siberia, Morocco, Salvador, South African Republic, Tonga, and Spain under most-favoured-nation treaties between these countries and the United Kingdom.

The numerous concessions mentioned above were, however, of a merely temporary character, ceasing to exist in 1898 as a consequence of the denunciation by the United Kingdom of her most-favoured-nation treaties with Germany and Belgium. This left Canada free to confine her lower tariff rates to the United Kingdom and to sister Dominions and colonies. A British preferential tariff, consisting at first of a remission of 25 p.c. of the duty ordinarily paid (Aug. 1, 1898), and later of a remission of 33⅓ p.c. of the ordinary rate of duty (July 1, 1900), was established. This method of preference was abandoned in 1904 for a specially low rate of duty on almost all imported dutiable commodities.

Subsection 2.—Tariff Relationships with Other Countries.*

Tariff relations between Canada and other countries are governed by: (1) application to Canada of some old commercial treaties of Great Britain; (2) participation in commercial treaties of Great Britain by Canadian Acts of Parliament; (3) Canadian Conventions of Commerce or Trade Agreements; (4) Exchange of Notes respecting reciprocal tariff concessions; (5) British preferential rates granted by the Tariff Act; (6) power of extending, by Orders in Council, British preferential or lower rates, intermediate rates, or other reduced duties as compensation for concessions received; (7) authority to impose a surtax on goods from a foreign country whose tariff discriminates against Canadian goods.

EMPIRE COUNTRIES.

Empire Preferences.—The Tariff Act assented to June 13, 1898, by which Canada replaced the Reciprocal Tariff of the year before by a purely British Preferential Tariff, specifically granted the benefit of the new preferential duties to the United Kingdom, Bermuda, British West Indies, and British Guiana. A provision whereby the benefit could be extended to any British possession whose tariff was equally favourable to Canada was at once invoked to give the preferences to British India, Ceylon, Straits Settlements, and New South Wales. In 1904 these preferences were extended to New Zealand, to the colonies now comprising the Union of South Africa, and to Southern Rhodesia, all of which, about that time, had granted newly introduced preferences to Canada. All these countries, except New South Wales, which had ceased to be a separate customs area, were named in the Tariff Act of Apr. 12, 1907 (still in force, in amended form), as being entitled to British preferential rates. The British preference margin, which had been increased in 1900 from one-quarter to one-third, remained at approximately one-third in the 1907 revision, but has since been much varied and enlarged. The 1907 Tariff contains three columns—British Preferential, Intermediate, and General. Sec. 4 of the Tariff Act empowers the Governor in Council to extend British preferential rates, intermediate rates in whole or in part, or most-favoured-foreign-nation treatment to any part of the Empire or British mandated territories.

British preference has been extended to many new areas under Sec. 4. (See p. 520 of the 1934-35 Year Book.) The year 1937 witnessed its further extension (Order in Council Sept. 29, 1937) to Malta, Gilbert and Ellice Islands, British Solomon Islands Protectorate, Nauru, Papua, and Norfolk Island. The Intermediate Tariff was extended to Hong Kong as from Feb. 4, 1933. Orders in Council were passed which accorded most-favoured-foreign-nation treatment to the United Kingdom and the Union of South Africa on July 19, 1935; to Australia and New Zealand on Aug. 21, 1935; to the British West Indies on Oct. 20, 1936; to all the non-self-governing British colonies and protectorates, Palestine, Tanganyika territory, and the territories of Togoland and Cameroons under British Mandate on

---

* Revised by W. Gilchrist, Chief, Foreign Tariffs Division, Department of Trade and Commerce.

Sept. 29, 1937. Ireland is similarly favoured due to the fact that her Trade Agreement with Canada guarantees to her duties as low as apply to the United Kingdom.

Either by means of the Tariff Act or Trade Agreements with the United Kingdom, Ireland, Australia, New Zealand, Union of South Africa, and British West Indies, Canada now accords her British Preferential Tariff, or lower rates, to almost the whole Empire, including British protectorates and mandated territories. In addition, the products of the Newfoundland fisheries are declared by Sec. 8 of the Tariff Act to be free of customs duty until otherwise determined by Order in Council.

Reciprocal concessions in Empire markets are widespread. Nearly all Canadian products are given tariff preferences when entering Great Britain and Northern Ireland, Australia, New Zealand, British West Indies, Bermuda, British Guiana, British Honduras, Fiji, Northern Rhodesia (Zambesi Basin), Gambia, Sierra Leone, Seychelles, British Somaliland, St. Helena, Western Samoa, British Protectorate of Tonga, British Solomon Islands, Gilbert and Ellice Islands, Cyprus, Channel Islands, and Isle of Man, while Southern Rhodesia, Mauritius, Ceylon, and Malta grant preference to most Canadian goods. To a considerable extent tariff preference is granted to Canadian goods in Ireland and Union of South Africa; also, on some goods, in the Federated and Unfederated Malay States, British North Borneo, Sarawak, Brunei, and Cayman Islands. Empire motor cars enjoy preference in Hong Kong and the Straits Settlements; spirits, wines, malt liquors, and tobaccos in Gibraltar; and wines in the Falkland Islands.

United Kingdom.—Canada has granted to the United Kingdom her British Preferential Tariff since its inception in 1897. The United Kingdom, in 1919, introduced preferences for Canada and the rest of the Empire on the limited number of products then comprising her tariff. In subsequent years, with expansion of the tariff, Empire preferences in the United Kingdom extended to more commodities. (See pp. 521-522 of the 1934-35 Year Book.) The Import Duties Act, effective Mar. 1, 1932, imposed a duty of 10 p.c. *ad valorem* on all non-Empire goods not already dutiable or specifically exempted. On the report of an Advisory Committee created by the Act the general rate was increased within two months on many manufactured articles to 15, 20, 25, 30, or 33⅓ p.c. Less comprehensive Orders issued from time to time have made further increases or changes. The Act exempted products of the Colonial Empire altogether and exempted products of the Dominions, India, and Southern Rhodesia until Nov. 15, 1932. A Trade Agreement between Canada and the United Kingdom signed on Aug. 20, 1932, extended the period of exemption of Canadian goods (see p. 486 of the 1936 Year Book) for five years. The 1932 Agreement was superseded by one signed Feb. 23, 1937, which renewed exemption of Canadian goods from the Import Duties Act, or any other duties not already applicable, with the qualification, as in the previous Agreement, that the United Kingdom, after notification, may impose duty (preferential) on Canadian eggs, poultry, butter, cheese, and other milk products, or in consultation with the Canadian Government may regulate supplies. The United Kingdom granted specified preferences on Canadian wheat, copper, lead, zinc (conditional on Empire producers supplying the demand at world prices); butter, cheese, raw or canned apples, pears, eggs, processed milk, honey, fish, timber, asbestos, and patent leather. The preference margin on Canadian natural silk hosiery was increased, the rate on motor cars and parts stabilized, the duty on reed organs removed, and a fixed preference on tobacco assured until Aug. 19, 1942. Canada obtained the benefit of all British Preferential Tariffs in the Colonial Empire and also exchanged specific preferences with certain colonies. Canada conceded to the United Kingdom reduced duties under 179 tariff items, gave assurance of no upward revision of existing preferential rates under 246 items, and in the case of 91 items (mainly products of a class not made in Canada), undertook that margins of preference would not be reduced. (See p. 489 of the 1938 Year Book.) The 1937 Agreement was approved by the Canadian Parliament on Mar. 31, 1937, implemented by the United Kingdom Budget of Apr. 20, 1937, and formally proclaimed in force from Sept. 1, 1937. It is to remain in force until Aug. 20, 1940, and afterwards until terminated on six months' notice.

To facilitate conclusion of a United Kingdom-United States Trade Agreement signed Nov. 17, 1938, Canada, Australia, New Zealand, the Union of South Africa, Newfoundland, and India consented to certain modifications of their rights under their existing trade agreements with the United Kingdom, Canada agreeing to cancellation of the 3 pence per bushel preference on wheat, seasonal reduction of preference on apples and pears, and some reduction of preference on canned apples, honey, chilled or frozen salmon, certain timber, and patent leather, as well as to certain changes in Colonial preferences. Similarly, the United Kingdom and the Union of South Africa consented to modification of preferences guaranteed to them by Canada to facilitate a new trade agreement between Canada and the United States, also signed Nov. 17, 1938.

Ireland.—Ireland at its inception in 1923 as the Irish Free State, granted Canada any preferential rates in force, and in return received the benefit of the British Preferential Tariff. A formal Trade Agreement between Canada and Ireland, signed Aug. 20, 1932, secured for all goods the produce and manufacture of Canada, the benefits of the lowest rates of duty accorded to similar products of any country. In return, goods the produce or manufacture of Ireland, when imported into Canada, were to be accorded the same tariff treatment as similar goods imported from the United Kingdom.

Australia.—A Trade Agreement between Canada and Australia (superseding a 1925 arrangement of limited scope) was brought into force on Aug. 3, 1931. British Preferential Tariffs were exchanged, with some reservations by Australia, and some additional concessions by Canada. Enlarged margins of preference were also granted by each country on certain products of importance to the other. (See p. 484 of the 1936 Year Book.) The Agreement, which was obligatory for one year, has remained in force subject to six months' notice of denunciation by either Government. During the fiscal year 1936-37 Canada's exports to Australia reached $27,000,000. Imports from Australia were $9,500,000. In view of trade balances being so much in Canada's favour, the Australian Government had intimated that if the Agreement was to continue, further Canadian concessions should be accorded Australian products. After negotiations, the Canadian duties on certain Australian goods were reduced by Order in Council effective Oct. 1, 1937, and the Trade Agreement was kept in force, subject, as before, to denunciation on six months' notice by either Government.

New Zealand.—Canada was granted the British preferential rates of the New Zealand Tariff established in 1903. Canada has extended her British Preferential Tariff to New Zealand since 1904. On Oct. 1, 1925, Canadian special rates then granted Australia were also extended to New Zealand, but withdrawn on Oct. 12, 1930. As from June 2, 1931, New Zealand cancelled nearly all her British preferential rates to Canada. On May 24, 1932, a new Trade Agreement was brought into force for one year (applicable also to Western Samoa and Cook Islands), whereby

Canada granted New Zealand some rates lower than British preferential, and otherwise the British Preferential Tariff. New Zealand restored the British preferential rates to Canada except for 6 items upon which intermediate rates were conceded. A New Zealand surtax of 22½ p.c. of duty (in a few instances 5 p.c.) instituted on Aug. 18, 1930, was cancelled by a New Zealand tariff amendment of Nov. 19, 1932, as regards all Empire goods except those from Canada, Union of South Africa, Irish Free State, Newfoundland, and India. The 1932 Trade Agreement was made for one year, but has been kept in force by various renewals. A one-year renewal to Sept. 30, 1938, effected by Canada granting further reductions in duty on some New Zealand products was followed by another renewal to Sept. 30, 1939, by Canada waiving exchange dumping duty on New Zealand butter and New Zealand undertaking to co-operate as far as possible by limiting shipments to proportions that would not unduly prejudice the interests of Canadian producers.

Union of South Africa.—In addition to the British Preferential Tariff which Canada accords to the Union of South Africa under the Tariff Act of 1907, commerce with the Union of South Africa is governed by a Trade Agreement signed Aug. 20, 1932. It provides for exchange of preferential treatment on selected commodities. (See p. 487 of the 1936 Year Book.) By an Exchange of Notes (Union of South Africa dated Aug. 2, 1935; Canada dated Aug. 31, 1935) effective July 1, 1935, each Dominion assures the other of as low rates as apply to the goods of any foreign country.

Southern Rhodesia.—A Trade Agreement signed Aug. 20, 1932, exchanging preferences on a few selected commodities and each country's British Preferential Tariffs on nearly all other commodities, was terminated as from Jan. 2, 1938, on notice by Southern Rhodesia. Although the Trade Agreement was cancelled, Southern Rhodesia, under a new tariff of 331 items, adopted May 18, 1937, accords Canada and the United Kingdom the same preferences over foreign countries on 177 tariff items. On 78 items Canada has a rate intermediate between the United Kingdom and foreign countries. On 10 items Canada has no preference over foreign countries although the United Kingdom has preference. On the remaining 66 items the rates are the same to all countries. Canada, under the Tariff Act of 1907, applies her British Preferential Tariff to Southern Rhodesian goods.

British West Indies.—Under the Canadian Customs Tariff Act, 1907, the British Preferential Tariff applies to the British West Indies, Bermuda, and British Guiana, and by Order in Council effective Feb. 1, 1913, to British Honduras. Special tariff concessions were made to the British West Indies in a reciprocal Trade Agreement of 1912, enlarged in 1920. The latter was replaced on July 6, 1925, by an Agreement still more extensive and brought formally into force by proclamation as from Apr. 30, 1927, and binding for a 12-year period and thereafter until terminated, on a year's notice. It includes: Jamaica, Trinidad, Barbados, Bahamas, Leeward Islands, Windward Islands, Bermuda, British Guiana, and British Honduras. (For further details see p. 484 of the 1936 Year Book.) Notice for termination of this Agreement as from Dec. 31, 1939, was given by the Dominion Government with a proposal that in the meantime negotiations be entered upon leading to a new Agreement.

FOREIGN COUNTRIES.

The power given under Sec. 4 of the Tariff Act to extend the Intermediate Tariff, in whole or in part, by Order in Council, to British countries, applies equally to foreign countries. Another important means of arranging for reciprocal concessions from foreign countries is afforded by Sec. 11 of the Customs Tariff which authorizes the making by Order in Council of such reductions of duties on goods imported into Canada from any other country as may be deemed reasonable by way of compensation for concessions granted by any such country. On the other hand, power is given under Sec. 7 to impose a surtax of 33⅓ p.c. *ad valorem* on goods from any foreign country which treats imports from Canada less favourably than those from other countries.

Most-Favoured-Nation Treatment.—Mutual guarantee of most-favoured-foreign-nation treatment, or, as it is commonly called, most-favoured-nation treatment, enters into many of the tariff arrangements between Canada and foreign countries. Usually, this means that Canada and the other contracting State agree that each party will accord to the goods of the other the benefit of the lowest duties applied to similar goods of any other foreign origin. There may be reservations. These reservations are likely to be tariff advantages, not relatively of far-reaching importance, such as one State may grant to another on historical, political, or geographical grounds, or some other special relationship. The concessions arising out of most-favoured-nation treatment under the Canadian tariff now consist of the rates of the Intermediate Tariff, and lower rates on some goods provided in Trade Agreements with France, the United States, and Poland. It will be seen that the guarantee by Canada of most-favoured-nation treatment to a foreign country does not entitle the foreign country to preferences existing only under the British Preferential Tariff or an Empire Trade Agreement. In other words, Empire preferences are confined within the Empire.

The benefit to Canadian exports of most-favoured-nation treatment in any country depends on the customs and treaty system of the particular importing country concerned. Several foreign nations have maximum and minimum schedules, meaning that there are two scales of duties for practically all goods imported. There may be also an intermediate scale of duties. Some countries maintain reduced duties only on specified items of their tariffs, which they have conceded in one or more commercial treaties. A country, too, may adhere strictly to a single-column tariff. Even when it makes concessions in a commercial treaty it may incorporate these in the normal tariff, thus discriminating against no country. The number of countries maintaining uniform tariffs regardless of the origin of goods, however, is becoming smaller from year to year. The benefit of most-favoured-nation treatment would, of course, depend also on the extent to which tariff favours apply to countries competing in the market in question. It has been the practice to include import restrictions when bargaining for most-favoured-nation treatment but the significance of this is greatly lessened in recent years by countries administering import quotas independently of most-favoured-nation commitments.

Argentina.—A Treaty of Amity, Commerce and Navigation between Great Britain and Argentina, signed Feb. 2, 1825, exchanging most-favoured-nation treatment is still applicable to the tariff relations between Canada and Argentina. Argentine customs duties, with minor exceptions, apply equally to imports from all countries. Extensive tariff reductions made in an Agreement of Sept. 26, 1933, with the United Kingdom, have been extended to imports from all countries.

Austria.—An Exchange of Notes, July 6-8, 1933, and Canadian Orders in Council of July 5, 1933, Dec. 29, 1933, and Jan. 14, 1935, the latter for an indefinite period, granted the Canadian Intermediate Tariff in return for most-favoured-nation treatment in Austria. Many important items of the Austrian Tariff were subject to conventional or reduced rates of duty which applied to countries having such treaty relationship with Austria. Although annexed to Germany in 1938 Austria remained a separate customs area until Apr. 1, 1939.

Belgium.—A Convention of Commerce between Canada and Belgium, signed July 3, 1924, provided for exchange of most-favoured-nation treatment of each other's goods. The Belgian Tariff consists of a Minimum Tariff and a Maximum Tariff (three times the minimum). The Minimum Tariff, however, is in practice applied equally to imports from all countries.

Bolivia.—Article 15 of the Treaty of Commerce of Aug. 1, 1911, between the United Kingdom and Bolivia, was accepted by Canadian Order in Council of July 20, 1935, the effect being an arrangement between Canada and Bolivia for exchange of most-favoured-nation treatment of each other's goods. Customs duties in Bolivia are applied equally to imports from all countries.

Brazil.—On account of Brazilian policy to cancel old Trade Agreements, an arrangement was made between Canada and Brazil by Exchange of Notes, July 25-30, 1936, granting the Canadian Intermediate Tariff for the Brazilian Minimum or lowest tariff. This arrangement continued the former reciprocal relationship between the two countries. It was superseded by an Exchange of Notes of June 12, 1937, providing for the mutual concession of most-favoured-nation treatment in tariff matters. The Tariff of Brazil consists mainly of a Minimum Tariff and a General Tariff, approximately one-quarter higher. Some rates lower than the minimum, established by an Agreement of Feb. 2, 1935, with the United States, apply to imports from countries enjoying most-favoured-nation treatment.

Colombia.—A Treaty of Friendship, Commerce and Navigation between the United Kingdom and Colombia, signed Feb. 16, 1866, requires Colombia and Canada to give each other most-favoured-nation treatment in tariff matters. Colombia on Mar. 1, 1938, gave one year's notice of termination of this treaty, but Notes were exchanged on Dec. 30, 1938, continuing the treaty in force until Sept. 30, 1939, and thereafter until terminated on three months' notice. An Agreement between Colombia and the United States, signed Sept. 13, 1935, created many reduced Colombian duties, to which treaty countries became entitled. Otherwise Colombian duties apply equally to imports from all countries.

Costa Rica.—A Costa Rican law of Feb. 16, 1933, established a surcharge of 30 p.c. of the duty on imports from countries not granting most-favoured-nation treatment to Costa Rica. Reduced duties appeared in an Agreement with the United States signed Nov. 28, 1936. An Exchange of Notes of Mar. 1-2, 1933, with the United Kingdom, set forth that Costa Rica would extend most-favoured-nation rates to any part of the British Empire on a reciprocal basis. A Canadian Order in Council of July 20, 1935, extended most-favoured-nation treatment to Costa Rica, thus entitling Canadian goods to a reciprocal concession in Costa Rica.

Czechoslovakia.—A Convention of Commerce between Canada and Czechoslovakia of Mar. 15, 1928, exchanged most-favoured-nation treatment in tariff matters. Czechoslovakia has conventional or reduced duties on many goods.

Denmark.—Danish Treaties of Peace and Commerce with Great Britain of Feb. 13, 1660-1, and July 11, 1670, establishing reciprocal most-favoured-nation treatment of each other's goods, still apply to the tariff relations between Canada and Denmark. Although Denmark has a single-tariff schedule, which is applicable to all countries, provision is made for penalty duties against countries which discriminate against her.

Estonia.—Article 28 of the United Kingdom-Estonia Treaty of Commerce and Navigation of Jan. 18, 1926, providing means for a most-favoured-nation arrangement between Canada and Estonia, was accepted by the Canadian Trade Agreements Act of June 11, 1928. The duties of the Estonian Minimum Tariff are half those of the General Tariff, while on some goods conventional rates lower than the Minimum Tariff exist.

Finland.—Article 23 of the United Kingdom-Finland Treaty of Commerce and Navigation of Dec. 14, 1923, providing means for exchange of most-favoured-nation treatment between Canada and Finland, was accepted by the Finland Trade Agreement Act of June 12, 1925. Finland has in force some conventional rates lower than her General Tariff.

France.—The Franco-Canadian Trade Agreement of 1922 having lapsed on June 16, 1932, negotiations for a new Agreement ensued and were concluded by the signing of a Trade Agreement on May 12, 1933. This Agreement was brought into force as from June 10, 1933. Under its terms Canada was accorded the rates of the French Minimum Tariff and most-favoured-nation treatment on 185 items or parts of items and reductions varying from 17 p.c. to 73 p.c. of the General Tariff on 24 items or parts. The French General Tariff is, for most goods, four times the Minimum Tariff. Intermediate rates are expressed as varying percentage reductions from the General Tariff. In return Canada conceded to France a rate as low as British preferential on 7 items, reductions from the Intermediate Tariff of from 10 p.c. to 25 p.c. on 95 items and Intermediate Tariff rates on an extensive list of items. The French colonies are included within the scope of the Agreement. The Agreement was supplemented by a Protocol of Feb. 26, 1935, and Notes exchanged Mar. 20, 1936, July 30, 1937, and Nov. 12-18, 1938, under which Canada secured the Minimum Tariff on 25 more items of the French Tariff, in return for adjustments of duty on some French products. These supplementary arrangements also made provision for quotas on many Canadian articles of which the import into France is subject to quantitative restrictions.

Germany.—In the absence of a commercial agreement, a 'Super Tariff' (*Obertariff*) created by a German law of Jan. 18, 1932, two to four times as high as the General Tariff, on goods affected, was invoked against Canada on Apr. 1, 1932. On account of negotiations that ensued, the Super Tariff was suspended on July 1, 1932, for six months. By Exchange of Notes effective Jan. 1, 1933, an Agreement, for the duration of three months, was entered into, giving Germany the Canadian Intermediate Tariff in return for its ordinary General Tariff and any existing conventional duties. This arrangement was renewed, first for nine months, and on Jan. 1, 1934, for an indefinite period, subject to termination on six months' notice. A Provisional Trade Agreement, including exchange of most-favoured-nation treatment, was signed on Oct. 22, 1936, to become effective fourteen days after exchange of ratifications, and to remain in force until Nov. 14, 1937, and thereafter until terminated on two months' notice. A Canadian Act ratifying the Agreement was assented to on Apr. 10, 1937. On account of the control exercised by Germany over exchange for payment of goods, a Payments Agreement was also entered into on Oct. 22, 1936. It authorized utilization of definite percentages of exchange accruing from German exports to Canada for purchase of Canadian wheat, apples, cheese, honey, fish, fox skins, asbestos, lumber, wood-pulp, sausage casings, and some other goods. Unallocated exchange is available for miscellaneous purchases. By Exchange of Notes on the day the Trade Agreement was signed, Canada agreed, on a basis of reciprocity, to give effect to the Trade Agreement as from

Nov. 15, 1936, the Payments Agreement having gone into force on that day. The Exchange of Notes is to remain operative until replaced by the Provisional Trade Agreement or until terminated on six weeks' notice.

Guatemala.—A Guatemalan law of Jan. 25, 1936 (renewing with slight changes a surtax law of Jan. 26, 1935), provided for increasing by 100 p.c. the customs duties on goods from countries whose trade balances are adverse to Guatemala and who had increased their exports to Guatemala by 100 p.c. or more in 1935 as compared with 1934. A Trade Agreement between Canada and Guatemala signed Sept. 28, 1937, by exchange of most-favoured-nation treatment, exempted Canadian goods from the customs surcharge and entitled Canada to reduced duties provided for some items in a Guatemalan Agreement of Apr. 24, 1936, with the United States. Pending ratification of the Agreement, an Exchange of Notes on the same date established most-favoured-nation treatment reciprocally as from Oct. 14, 1937. A Canadian Act ratifying the Agreement was assented to on May 25, 1938. Ratifications were exchanged bringing the Agreement into force as from Jan. 14, 1939. It is drawn for three years and thereafter until terminated on six months' notice.

Haiti.—Haiti reduced duties on some United States products in a Trade Agreement of Mar. 28, 1935, and on Apr. 9, 1935, adopted a new Maximum Tariff (double the Minimum) which would have applied to Canada, if by Exchange of Notes of June 10, 1935, renewed Apr. 6, 1936, and Apr. 15, 1937, Canada and Haiti had not exchanged most-favoured-nation treatment in tariff matters. A Canadian-Haiti Trade Agreement signed Apr. 23, 1937, and approved by a Canadian Act assented to on May 25, 1938, confirms this tariff arrangement. The Agreement is for one year and thereafter until terminated on six months' notice. Ratifications were exchanged bringing the Agreement into effect in both countries on Jan. 10, 1939.

Hungary.—Article 20 of the United Kingdom-Hungary Treaty of Commerce and Navigation of July 23, 1926, affording means for exchange of most-favoured-nation treatment in tariff matters between Canada and Hungary, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Hungary has in force various conventional rates lower than her General Tariff, resulting from treaties with other countries.

Italy.—A Convention of Commerce between Canada and Italy of Jan. 4, 1923, provided for exchange of most-favoured-nation treatment in tariff matters. The General Tariff of Italy is applicable to imports from all countries except where reduced rates for many goods have been established by commercial treaties.

Japan.—A Treaty of Commerce and Navigation between the United Kingdom and Japan on a most-favoured-nation basis signed Apr. 3, 1911, was accepted by Canada (with minor provisos) in an Act of Apr. 10, 1913. Certain surtaxes were imposed by Japan on July 20, 1935, and by Canada on Aug. 5, 1935, against each other's goods. An Exchange of Notes on Dec. 26, 1935, effected the removal of the surtaxes by both countries and stated the basis for Canadian customs valuations on Japanese goods. (See p. 489 of the 1936 Year Book.)

Latvia.—Article 26 of the United Kingdom-Latvia Treaty of Commerce and Navigation of June 22, 1923, providing means for exchange of most-favoured-nation treatment in tariff matters between Canada and Latvia, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Latvia has a minimum schedule of duties and a maximum schedule twice as high, as well as some rates of duty fixed by conventions with other countries.

Lithuania.—Article 4 of the United Kingdom-Lithuania Agreement of May 6, 1922, providing means for exchange of most-favoured-nation treatment in tariff matters between Canada and Lithuania, was accepted by the Canadian Trade Agreements Act of June 11, 1928. Lithuania has in force a Maximum Tariff on certain specified items double the ordinary Tariff. Resulting from treaties on a few items there are rates lower than the ordinary Tariff.

Netherlands.—A Canadian-Netherlands Convention of Commerce of July 11, 1924, provided for exchange of most-favoured-nation treatment in tariff matters between Canada, Netherlands, Netherlands India, Surinam, and Curaçao. The Netherlands Tariff consists of a single schedule of duties, without tariff preference to any country.

Norway.—A Convention of Commerce and Navigation between the United Kingdom and Norway (and Sweden) of Mar. 18, 1826, is applicable to British territories to the extent of still providing exchange of most-favoured-nation treatment in tariff matters between Canada and Norway. Norway has a single-tariff schedule but there exist provisions for imposing penalty duties on non-reciprocating countries.

Panama.—Article 12 of a United Kingdom-Panama Treaty of Commerce and Navigation, signed Sept. 25, 1928, affording means for reciprocal most-favoured-nation relations with Panama, was accepted by Canadian Order in Council of July 20, 1935. A Canadian Order in Council of Dec. 29, 1936, conceded the Canadian Intermediate Tariff to the Panama Canal Zone. Duties in Panama apply equally to imports from all countries.

Poland.—A Convention of Commerce between Canada and Poland, signed July 3, 1935, effective Aug. 15, 1936, exchanged most-favoured-nation treatment and, as regards scheduled goods, granted reductions from the Canadian Intermediate Tariff and from the lowest Polish tariff. The Polish Tariff comprises two columns of rates for all goods, the rates of Column I being about 25 p.c. higher than the rates of Column II. On some goods there are conventional rates resulting from trade treaties which Poland has concluded with other countries and which are lower even than the rates of Column II. The Free City of Danzig was declared party to the Convention from Jan. 1, 1937.

Portugal.—Article 21 of the Treaty of Commerce and Navigation between the United Kingdom and Portugal, signed Aug. 12, 1914, providing for exchange of most-favoured-nation treatment in tariff matters, was accepted in the Canadian Trade Agreements Act of June 11, 1928. The Portuguese Tariff has maximum and minimum scales, the treaty arrangement securing the minimum for Canada.

Roumania.—Article 36 of the Treaty of Commerce and Navigation between the United Kingdom and Roumania of Aug. 6, 1930, affording means for exchange of most-favoured-nation treatment between Canada and Roumania, was utilized in an Exchange of Notes of Sept. 30, 1930. Roumania has a Minimum Tariff on some commodities, one-third lower than her General Tariff, also, as a result of treaties, reductions from the Minimum Tariff on certain goods.

Russia.—A Canadian Order in Council of Feb. 27, 1931, prohibiting importation from the Union of Soviet Socialist Republics of coal, wood-pulp, pulpwood, lumber, asbestos, and dressed furs, was cancelled, by an Order in Council of Sept.

10, 1936, in consequence of which the Soviet Union repealed an Order of Apr. 20, 1931, which had prevented her importing organizations and trade representatives from purchasing Canadian goods or chartering Canadian vessels.

Salvador.—By Exchange of Notes of Nov. 2, 1937, Canada and El Salvador granted each other most-favoured-nation treatment in tariff matters. The Tariff of El Salvador consists of a Maximum Tariff, a Minimum Tariff (one-third the maximum) and some conventional rates lower than the minimum.

Spain.—A Treaty of Commerce and Navigation between the United Kingdom and Spain, signed Oct. 31, 1922 (revised Apr. 5, 1927), providing for exchange of most-favoured-nation treatment in tariff matters, was accepted on behalf of Canada by the Spanish Treaty Act of June 11, 1928. The Tariff of Spain consists of a First (the highest) Tariff, a Second Tariff (usually one-third of the first) and some conventional rates lower than the Second.

Sweden.—A Convention of Commerce and Navigation between the United Kingdom and Sweden (and Norway) of Mar. 18, 1826, had the effect of establishing most-favoured-nation tariff relationship between Canada and Sweden. Sweden, in commercial treaties with various countries, has granted conventional rates of duty which, however, have been incorporated into the ordinary tariff and made applicable to all countries.

Switzerland.—Under the Treaty of Friendship, Commerce and Reciprocal Establishment between the United Kingdom and Switzerland of Sept. 6, 1855, Canada and Switzerland exchanged most-favoured-nation treatment of each other's goods. Switzerland has reduced some of her rates in treaties, but reductions are incorporated in a single-column tariff which applies to all countries.

United States.—A Trade Agreement between Canada and the United States, signed on Nov. 15, 1935, became operative as regards tariff reductions on Jan. 1, 1936, and upon exchange of ratifications went into force in its entirety on May 14, 1936. United States negotiations were under a tariff amendment Act of June 12, 1934 (Reciprocal Trade Agreements Act), first enacted for three years duration, but extended for another three years by a law of Mar. 1, 1937. The enactment sets 50 p.c. as the maximum reduction that can be made in any rate of duty. Concessions to Canada in the 1935 Agreement were 50 p.c. on 27 items; 25 to 49 p.c. on 32 items; under 25 p.c., or existing rate confirmed on 8 items; continuance of free entry assured on 21 items. There were Canadian tariff reductions on 88 items, modification of some customs valuations and exemption from duty of purchases up to $100 made by returning Canadian residents, corresponding to a similar provision in the United States tariff. The Agreement exchanged unconditional most-favoured-nation treatment with reservation of Canada's Empire preferences and United States preferences granted to Cuba, Philippine Islands and the Panama Canal Zone.

A more comprehensive Trade Agreement, signed Nov. 17, 1938, grants Canada concessions on 202 items or sub-items of the United States tariff, covering 83 p.c. of Canadian sales (dutiable and free) to the United States for the year 1937. On 107 of these items, representing $76,577,000 (about half the dutiable imports in 1937) the maximum 50 p.c. reduction in duty was obtained. Of the remaining items 58 are accorded reductions in duty ranging from 10 to 50 p.c., 5 are assured continuance of the existing rate and 32 continuance of free entry. All concessions of the 1935 Agreement are retained and where quotas existed, they are either increased or the quota limitation entirely removed. Principal Canadian products benefiting are lumber, shingles, horses, cattle, dairy products, hog products, potatoes, fish, certain grains, hay, poultry, pulp and paper, metals, non-metallic minerals, ferro-alloys, and many lines of manufactured goods. Among the benefits accruing to Canada under the reciprocal most-favoured-nation clause are many reductions in United States duty arising out of a United States-United Kingdom Trade Agreement signed on the same day as the Canadian Agreement. Canada's concessions to the United States affect 447 tariff items or sub-items, under which imports for the fiscal year 1937 amounted to about 58 p.c. of the total imports from the United States. Reductions in Canadian duty are made on 283 items or sub-items, and duty is fixed at rates hitherto effective on 146. Canada undertakes to remove a special excise tax of 3 p.c. now levied on these items. The Agreement contains safe-guarding clauses as to quantitative restrictions, customs valuation, variations in rate of exchange, preventing the principal benefit of a concession going to a third country. The President of the United States formally proclaimed the new Trade Agreement on Nov. 25, 1938. On the day following the President's Proclamation, *i.e.*, Nov. 26, 1938, Article IX of the Agreement became provisionally effective, the result being to exempt Canadian lumber, shingles, and telegraph poles shipped to the United States from the necessity of a mark of origin. Duty concessions, except where otherwise stated, became provisionally effective in both countries on Jan. 1, 1939. The Canadian ratifying Act was assented to in Ottawa by His Majesty the King on May 19, 1939. The Agreement is to go fully into force on exchange of ratification by the King and a copy of the President's Proclamation. It is to be effective for three years from the effective date of Article IX and thereafter, subject to termination on six months' notice by either party.

Uruguay.—Canada signed an Agreement, on a most-favoured-nation basis, with Uruguay on Aug. 12, 1936, as regards customs duties, quotas, and allocation of exchange for commercial transactions, to come into force 30 days after exchange of ratifications, and to remain in force for three years and thereafter until termination on six months' notice. A Canadian Act ratifying the Agreement was assented to on Apr. 10, 1937. The Agreement awaits ratification by Uruguay. Notes were exchanged at the same time, effective at once, granting the Canadian Intermediate Tariff in return for Uruguayan trading facilities for Canadian exports, pending the coming into force of the formal Agreement. Provision exists under the tariff of Uruguay whereby duties may be increased by 50 p.c. on imports from countries which do not offer reciprocity, or do not accord most-favoured-nation treatment to Uruguayan goods.

Venezuela.—A Treaty of Amity, Commerce and Navigation between the United Kingdom and Colombia (of which Venezuela was then part) of Apr. 18, 1825, applies to Canada and provides for exchange of most-favoured-nation treatment. The Venezuelan Executive Power is authorized to increase duties up to 100 p.c. on certain goods originating in a specified country, but it has not been learned that this power has been used. A limited number of reduced Venezuelan duties are provided in a Trade Agreement of Aug. 6, 1936, between France and Venezuela. Otherwise no preferences exist under the Venezuelan Tariff.

Yugoslavia.—Article 30 of the United Kingdom-Serb-Croat-Slovene Kingdom Treaty of Commerce and Navigation of May 12, 1927, (affording means for exchange of most-favoured-nation treatment of each other's goods between Canada and Yugoslavia) was accepted by means of the Canadian Trade Agreements Act of June 11, 1928. The Yugoslavian Tariff comprises maximum, minimum, and conventional duties (usually incorporated in the minimum duties).

Section 2.—The Commercial Intelligence Service.*

The Commercial Intelligence Service, maintained by the Department of Trade and Commerce, is designed to further the interests of Canadian trade in other parts of the Empire and in foreign countries. To this end there are established throughout the world offices administered by Trade Commissioners. These Trade Commissioners make periodical reports upon trade and financial conditions, variations in markets, and the current demand or opportunities for Canadian products. They also secure and forward to the Department in Ottawa specific inquiries for Canadian goods and in general exert their best efforts for the development and expansion of overseas markets.

Organization at Ottawa.—Besides the overseas organization of the Commercial Intelligence Service, there is a headquarters staff at Ottawa. This is presided over by a Director, who is the head of the Service and administers and unifies the work assigned to the various Trade Commissioners. Assisting the Director are the following divisions: Directories—where the Exporters Directory, listing Canadian exporters with their agents abroad, commodities handled, ratings, cables and codes used, etc., and the Foreign Importers Directory are kept up to date; Editorial—where the Commercial Intelligence Journal is compiled; Commodity Records—where information regarding markets for Canadian export commodities is indexed; Economics; Animal and Fish Products; Vegetable Products; Metals and Chemical Products; Forest Products; and Manufactured Products. These last five divisions handle correspondence falling within their respective classifications.

In order to keep abreast of Canadian industrial development, each Trade Commissioner makes a periodic tour of Canada and while in this country gives first-hand information to possible Canadian exporters and makes direct contacts with Canadian manufacturers regarding opportunities and conditions of trade in his territory.

Organization Abroad.—A list of the countries in which Canadian Trade Commissioners are located, showing territory covered, name, post office, and cable address of the Trade Commissioner in each case is given below:—

CANADIAN GOVERNMENT TRADE COMMISSIONERS.

NOTE.—This list was revised as at Jan. 1, 1939. Cable address of Trade Commissioners is "Canadian" unless otherwise stated.

Argentine Republic (Territory includes Uruguay)...	J. A. Strong, B. Mitre 430, Buenos Aires (1).
Australia—	
Sydney (Territory covers Australian Capital Territory, New South Wales, Queensland, Northern Territory and Dependencies.)	L. M. Cosgrave. Address for letters—P.O. Box No. 3952V. Office—City Mutual Life Building, Hunter and Bligh Streets.
Melbourne (Territory covers States of Victoria, South Australia, Western Australia, and Tasmania.)	Frederick Palmer. Address for letters—Box 196C, G.P.O. Office—Safe Deposit Office Building, Melbourne.
Belgium...	Yves Lamontagne, Shell Building, 60 Ravenstein Street, Brussels.
Brazil...	L. S. Glass. Address for letters—Caixa Postal 2164, Rio de Janeiro. Office—Ed. Da "A Noite", Sala 802, Praca Maua.

---

* Revised by L. D. Wilgress, Director, Commercial Intelligence Service, Department of Trade and Commerce.

CANADIAN GOVERNMENT TRADE COMMISSIONERS—continued.

British Malaya (Territory includes the Straits Settlements, the Federated and Unfederated Malay States, British Borneo, Northern Sumatra, Siam and Netherlands Indies.)	B. C. Butler, Union Building, Singapore, Straits Settlements.
British West Indies—	
Trinidad (Territory includes Barbados, Windward and Leeward islands and British Guiana.)	M. B. Palmer. Address for letters—P.O. Box 125, Port of Spain. Office—Colonial Bank Building.
Jamaica (Territory covers Jamaica, Haiti, the Bahamas, and British Honduras.)	F. W. Fraser, P.O. Box 225. Office—Canadian Bank of Commerce Chambers, Kingston.
China—	
Shanghai (Territory includes North and Central China and Manchuria.)	Acting Trade Commissioner. P.O. Box 264, Shanghai. Office—Ewo Building, 27 The Bund, Shanghai.
Cuba (Territory includes Dominican Republic and Puerto Rico.)	C. S. Bissett. Address for letters—Apartado 1945, Havana. Office address—Royal Bank of Canada Building, Calle Aguiar 75, Havana.
Egypt (Territory includes the Sudan, Palestine, Cyprus, Iraq, Syria, Persia, Greece, Turkey, Bulgaria, and Roumania.)	Henri Turcot. Address for letters—P.O. Box 1770, Cairo. Office—22 Shari Kasr el Nil, Cairo.
France (Territory includes French Colonies in North Africa.)	Hercule Barré, Commercial Attaché, 3 rue Scribe, Paris (9). Cable address—Cancomac.
Germany (Territory covers Germany, Czechoslovakia, Austria, Hungary, Poland, Lithuania, Latvia, and Estonia.)	J. C. McGillivray, 801 Columbus Haus, Potzdamer Platz, Berlin W. 9.
Hong Kong (Territory includes South China, the Philippines, and Indo-China.)	V. E. Duclos. Address for letters—P.O. Box 80, Hong Kong. Office—Hong Kong and Shanghai Bank Building, Hong Kong.
India and Ceylon..................................	Paul Sykes. Address for letters—P.O. Box 2003, Calcutta. Office—23 Esplanade Mansions, Government Place East, Calcutta.
Irish Free State and Northern Ireland...............	James Cormack, 66 Upper O'Connell Street, Dublin, Irish Free State; and 44 Ann Street, Belfast, Northern Ireland. Cable address—Adanac.
Italy (Territory includes Spain, Portugal, Gibraltar, Malta, Albania, and Jugoslavia.)	A. B. Muddiman, Via Manzoni Nr. 5, Milan (102).
Japan—	
Tokyo..	C. M. Croft, Commercial Secretary. Address for letters—P.O. Box 18, Akasaka Post Office, Tokyo. Office—Canadian Legation, 16 Omotecho, 3-chome, Akasakaku, Tokyo.
Kobe...	P. V. McLane. Address for letters—P.O. Box 230, Kobe. Office—309 Crescent Building, 72 Kyomachi.
Mexico (Territory includes Guatemala, Honduras, and Salvador.)	R. T. Young. Address for letters—Apartado Num. 126-bis, Mexico City. Office—Edificio Banco de Londres y Mexico, Num. 30, Mexico City. Cable address—Cancoma.
Netherlands (Territory includes Switzerland.)	James Langley, Coolsingel 111b, Rotterdam.
New Zealand (Territory includes Fiji and Western Samoa.)	W. F. Bull. Address for letters—P.O. Box 33, Auckland. Office—Yorkshire House, Shortland Street, Auckland.
Norway (Territory includes Scandinavian countries and Finland.)	Richard Grew. Address for letters—Stortingsgaten 28, Oslo.
Panama (Territory includes the Canal Zone, Venezuela, Colombia, Nicaragua, and Costa Rica.)	W. J. Riddiford. Address for letters—P.O. Box 222, Panama City. Office—Royal Bank of Canada Building, Santa Ana Plaza, Panama City.
Peru (Territory includes Bolivia, Chile, and Ecuador.)	M. J. Vechsler. Address for letters—Casilla 1212, Lima. Office—Portal de Belen No. 166, Plaza, San Martin, Lima.
South Africa—	
Cape Town (Territory includes Cape Province and Southwest Africa, Natal, Tanganyika, Kenya, Uganda, Mauritius, and Madagascar.)	G. R. Heasman. Address for letters—P.O. Box 683, Cape Town. Office—Cleghorn and Harris Building, Adderley Street, Cape Town. Cable address—Cantracom.
Johannesburg (Territory includes Transvaal, Orange Free State, Bechuanaland, Somaliland, the Rhodesias, Portuguese East Africa, Mozambique, and Nyasaland.)	J. L. Mutter. Address for letters—P.O. Box 715, Office—Prudential Assurance Building, 92 Fox St., Johannesburg. Cable Address—Cantracom.
United Kingdom—	
London...	Frederic Hudd, Chief Trade Commissioner in the United Kingdom, Canada House, Trafalgar Square, S.W. 1. Cable Address—Sleighing, London.
London (Territory covers Home Counties, Southeastern Counties, and East Anglia.)	J. H. English, Canada House, Trafalgar Square, S.W. 1.

CANADIAN GOVERNMENT TRADE COMMISSIONERS—concluded.

United Kingdom—concluded.	
London (Territory—for fresh fruit only—covers United Kingdom, Norway, Denmark, Sweden, France, Holland, Belgium, and Germany.)	W. B. Gornall, Fruit Trade Commissioner, Aldine House, Bedford Street, Strand, W.C. 2. Cable address—Canfrucom.
London	W. A. Wilson, Animal Products Trade Commissioner, Canada House, Trafalgar Square, S.W. 1. Cable address—Agrilson.
Liverpool (Territory covers North of England, Lincolnshire, North Midlands, and North Wales.)	A. E. Bryan, Martins Bank Building, 31 North John Street.
Bristol (Territory covers West of England, South Wales, and South Midlands.)	E. L. McColl, Northcliffe House, Colston Ave.
Glasgow	G. B. Johnson, 200 St. Vincent Street. Cable address—Cantracom.
United States—	
New York City. (Territory includes Bermuda.)	D. S. Cole, British Empire Building, Rockefeller Centre, New York City. Cable address—Cantracom.

Under an arrangement made by the Minister of Trade and Commerce with the British Foreign Office, Canadian manufacturers, exporters, and others interested in trade matters may secure information and advice from British commercial diplomatic officers and British consuls in all countries in which Canada is not represented by her own Commercial Intelligence Service.

Commercial Intelligence Journal.—The Commercial Intelligence Journal, containing the reports of the Trade Commissioners and other pertinent material relating to export trade, is published weekly by the Department of Trade and Commerce in both English and French editions. The subscription price for either edition is $1 per annum in Canada and $3·50 outside of the Dominion. Special reports dealing with various phases of Canada's export trade are also issued from time to time, as supplements to the Commercial Intelligence Journal.

Section 3.—Statistics of External Trade.*

External trade statistics are derived by recording the physical movement of goods outwards or inwards across the frontiers or through ocean ports and the valuations placed upon them at the time of movement. Such statistics cannot take cognizance of the complex financial transactions involved in this physical movement of goods, which transactions may take place prior to or subsequent to the actual shipment (although in investigating the balance of international payments, as in Sec. 5 of this chapter, such financial transactions are the sole consideration). Certain problems of procedure arise in recording trade statistics and it is necessary to explain these. Such problems may be conveniently classified as those relating generally to recording the movements of goods and those relating to the movements of gold.

General Explanations regarding Trade Statistics.—For the correct interpretation of the statistics of external trade, it is necessary that the following definitions and explanations of terms used, as well as certain features of the statistics that necessitate adjustments to the external trade figures, should be carefully kept in mind, if the true position of trade in relation to the total of Canada's international transactions is to be understood.

Fiscal Years.—The Canadian fiscal year ended on June 30 of the years from 1868 to 1906, and on Mar. 31 of 1907 and subsequent years.

---

* Revised by A. L. Neal, B.A., B.Sc. (Econ.), Chief, External Trade Branch, Dominion Bureau of Statistics. This Branch publishes the Annual Report on the Trade of Canada, the Condensed Preliminary Report on the Trade of Canada (annual), the Quarterly Report on the Trade of Canada, the Calendar Year Report on the Trade of Canada, the Summary of the Trade of Canada (monthly), etc. For complete list of the publications of this Branch, see Chapter XXIX, Section 1, under "External Trade".

Quantities and Values.—In all tables of imports and exports, the quantities and values are based upon the declarations of importers (import entries) and exporters (export entries), as subsequently checked by customs officials.

Imports: Valuation.—"Imports" means "imports entered for consumption". "Entered for consumption" does not necessarily imply that the goods have been actually consumed in Canada, but that they have passed into the possession of the importer and that duty has been paid on that portion liable for duty.

Under the main provisions of the law, the value of merchandise imported into Canada is the fair market value or price thereof when sold for home consumption in the principal markets of the country from which, and at the same time when, said merchandise was exported directly to Canada; but the value shall not be less than the price to jobbers and wholesalers generally, nor less than the actual cost of production at the time of shipment plus a reasonable advance for cost of selling and profit. (See Secs. 35 to 45 of the Customs Act.) Under these provisions and amendments thereto, some imports are given arbitrary valuations differing from those upon which actual payments for the imports are made.

For Customs entry purposes, the value of the currency of the country of export is converted to Canadian currency at exchange ratios as authorized by law and Orders in Council. (See Sec. 55 of the Customs Act and Orders in Council respecting currency valuations.) Differences arising from fluctuations in the exchange rates of foreign currencies are treated more fully below under the heading "Discrepancies in Trade Statistics between Canada and Other Countries".

Canadian Exports: Valuation.—"Canadian produce" exported includes Canadian products or manufactures, also exports of commodities of foreign origin which have been changed in form or enhanced in value by further manufacture in Canada, such as sugar refined in Canada from imported raw sugar, aluminium extracted from imported ore, and articles constructed or manufactured from imported materials. The value of exports of Canadian merchandise is the actual cost or the value at the time of exportation at the points in Canada whence consigned for export.

Foreign Exports: Valuation.—"Foreign produce" exported consists of foreign merchandise which had previously been imported (entered for home consumption). The value of such commodities is the actual cost.

Countries to which Trade is Credited.—Imports are classified as received from the countries whence they were consigned to Canada. The countries of consignment are the countries from which the goods have come, without interruption of transit, save in the course of transhipment or transfer from one conveyance to another. The countries whence goods are consigned are not necessarily the countries of actual origin, since goods produced in one country may be purchased by a firm in another country and thence dispatched, after a longer or shorter interval, to Canada. In such cases the second country would be the country of consignment, to which the goods would be credited. An example is the case of tea grown in the Orient but purchased in the bonded market in London, England; Canadian statistics record such imports as coming from the United Kingdom.

Exports are credited to the country of final destination, *i.e.*, the country to which they are consigned, whether that country possesses a seaboard or not. The country of final destination is the country to which goods exported from Canada are intended to pass, without interruption of transit save in the course of transhipment or transfer from one means of conveyance to another.

Discrepancies in Trade Statistics between Canada and Other Countries.—Canadian statistics of exports are rarely in exact agreement with the import figures of her customers and similar differences occur with Canadian imports. Many factors contribute to these discrepancies; among these are the following:—

(1) Differences in the basis of the Canadian valuations and those of the valuations of other countries.

The recent period of disturbed currency relations between countries has introduced an additional element of difference in valuations. Thus imports from the United Kingdom have been valued all along at $4·86\frac{2}{3}$ to the £, although for two years after Sept. 21, 1931, the actual value of the £ was below that figure, dropping as low as $3·70, and the actual value of imports from the United Kingdom was thereby greatly exaggerated. More recently, when the exchange value of the £ was above par, imports from the United Kingdom were undervalued. Similar difficulties have resulted from disturbances in exchange levels with other countries, and the placing of arbitrary valuations upon their currencies, as in the case of imports from Japan.

A further discrepancy in valuation of imports from the United Kingdom existed from 1920 to Mar. 31, 1935, in connection with distilled spirits, an important item in our imports from that country. The valuation of Canadian imports of spirits from the United Kingdom included, during this period, the excise duty in addition to the British export valuation, an excess valuation aggregating over $200,000,000 for the period 1920-34. The excise duty has been excluded from the valuation of such imports since Apr. 1, 1935.

(2) Even where the statistics cover the same period of time, there are quantities of goods on their way from the exporting to the importing country at the beginning and end of the period.

(3) By far the greatest discrepancies occur from the impossibility of determining the country of final destination for exports or the actual country of origin for imports. A considerable proportion of Canada's exports to overseas countries (11·4 p.c. in 1938) is shipped *via* the United States. Some of this is credited by importing countries to the United States. Canadian grain exports, for example, are frequently routed through the United States in bond. Most of this grain leaves Canada with the United Kingdom as the stated destination, but large quantities are later diverted to other European or overseas countries and some is taken out of bond for consumption in the United States. Thus the Canadian record of exports to the United Kingdom may be $100,000,000 or more in excess of Canadian products actually received by the United Kingdom, while stated exports to other overseas countries are short this amount. Again, United States grain is routed through Canada and shipped from Montreal and is therefore frequently shown by other countries as imported from Canada, while it is included in United States statistics as an export to Canada. As mentioned above, purchases in bonded markets in England, Germany, Belgium, and France are included in Canadian imports from those countries but are not included by those countries in exports to Canada.

For more detailed discussion of this subject see the article and tables on "Discrepancies in Trade Statistics" on pp. 778-781 of the Annual Report on the Trade of Canada, 1928, and pp. 21 and 24 of the Condensed Preliminary Report on the Trade of Canada, 1938, both published by the Dominion Bureau of Statistics.

Treatment of Gold in Trade Statistics.—Exports of gold in Canadian trade statistics are distinguished as between monetary and non-monetary. Monetary gold exports are those which entail a corresponding reduction in the Dominion's monetary gold stocks. All other gold exports (classed as non-monetary) are shown as merchandise and included with total merchandise exports in trade statistics. This procedure was determined, following the Conference of British Commonwealth

Statisticians in 1935, by the Dominion Bureau of Statistics in conference with the Bank of Canada and the Department of National Revenue. In former times there was a movement of gold from Canada in the form of "gold-bearing quartz, dust, nuggets, and gold bullion obtained direct from mining operations". When the Royal Mint in Ottawa began to refine gold, exports formerly shipped as "gold-bearing quartz, dust, etc.", began to be exported in the form of bullion and were recorded under "coin and bullion" as distinct from "merchandise". In order to maintain comparability with the statistics of previous years it was considered expedient to adopt the present procedure. It was also felt that since gold, like other great export staples, is a product of Canadian resources and industry and, in large part, is exported independently of domestic monetary considerations, it ought not to be excluded from the statistics of exports, and should not be classed as 'money' when it bears no relation to the Canadian monetary system. The change was inaugurated on Apr. 1, 1936, and appropriate revisions made in the trade statistics for previous years back to 1926. Prior to this time no substantial revision was necessary. When the change was made it was considered that there would be no re-exports of non-monetary gold, *i.e.*, exports (non-monetary in character) of previously imported gold; therefore no provision was made for this distinction with respect to exports of foreign products. However, it was found, as will be indicated below, that in order to faithfully represent the facts of the case the distinction was necessary for foreign exports as well as domestic exports and, accordingly, that has been done since Apr. 1, 1938. Since June 1, 1931, gold exports have been valued at the monthly average current market price.

Certain difficulties, however, arise when gold is included with ordinary commercial commodities.

The fact that gold is a money metal gives it peculiar attributes that distinguish it from other commodities. In particular, the movement of gold in international trade is determined almost exclusively by monetary factors. The amount of exports may fluctuate widely from month to month owing to other than ordinary trade or commercial considerations. The nationality of gold does not affect its value as an export asset and, therefore, domestic and foreign gold are mutually substitutable. It is doubtless correct to treat new gold based on current production as a commodity of mineral origin and so classify it in export statistics, but it may happen that foreign (*i.e.*, previously imported) gold may be exported without reducing monetary stocks. At certain times recently, substantial amounts of foreign gold coin have been exported owing to the premium obtainable on coined gold. Exports of domestic bullion were correspondingly smaller, since it was substituted for the foreign gold in stocks held in Canada. Furthermore, gold does not move in international trade in any direct or normal relation to sales and purchases. It may be sold abroad without moving out across the frontier. Trade statistics deal only with physical movements, sales or purchases of gold which do not involve an actual movement being more properly taken care of in the "International Balance of Payments" statements dealt with in Sec. 5 of this chapter. Domestic gold added to earmark stock, although sold abroad, does not appear in export statistics because it remains in Canada. In view, however, of the relation to external trade, statistics respecting holdings of earmarked gold are now appended in the Bureau of Statistics trade reports with an explanatory footnote, while in this edition of the Year Book they are shown in Statement XV under Sec. 5, p. 563.

To comprehend in its entirety, therefore, the effect of gold movements upon the figures of the export trade of Canada, it is necessary to consider non-monetary exports of domestic gold and of foreign gold, as well as earmarkings by the Bank of Canada. Admittedly, the statistics in this connection are somewhat complicated, but they represent complicated facts. However, it is very necessary that the effects of fluctuations in the movement of gold should be borne in mind in dealing with statistics of trade. Gold may now form a very large item in the value of annual exports (Canada's production in 1938 is estimated as worth nearly $165,000,000) so that fluctuations in the movement may materially affect the apparent value and distribution of Canada's trade. For instance, in one year the major part of the gold may be shipped to London, in another year to New York, or it may be accumulated under earmark, resulting in wide variation in the value and proportion of exports to the United Kingdom and the United States. So far exports have been confined almost entirely to these two countries. It may sometimes be desirable to view movements of trade in strictly commercial commodities alone. In order to facilitate doing so, a statement of non-monetary gold exports is given below, which will enable the student to make the desired adjustments to the trade statistics given in the main body of this chapter.

I.—EXPORTS OF NON-MONETARY GOLD INCLUDED IN MERCHANDISE TRADE STATISTICS, FISCAL YEARS 1934-38.

Item and Country.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
DOMESTIC EXPORTS.					
United Kingdom	60,981,635	16,702,500	2,600,196	1,884,894	2,533,022
United States	28,258,637	83,741,672	85,583,067	81,117,759	90,921,880
Other countries	Nil	6,970	33,620	161,897	210,448
TOTALS, DOMESTIC EXPORTS	89,240,272	100,451,142	88,216,883	83,164,550	93,665,350
FOREIGN EXPORTS.					
United Kingdom	Nil	Nil	Nil	Nil	Nil
United States	“	38,325	87,000	11,200	12,999
Other countries	“	Nil	Nil	Nil	Nil
TOTALS, FOREIGN EXPORTS	Nil	38,325	87,000	11,200	12,999
GRAND TOTALS	89,240,272	100,489,467	88,303,883	83,175,750	93,678,349

Subsection 1.—Value and Quantum of World Trade.[*]

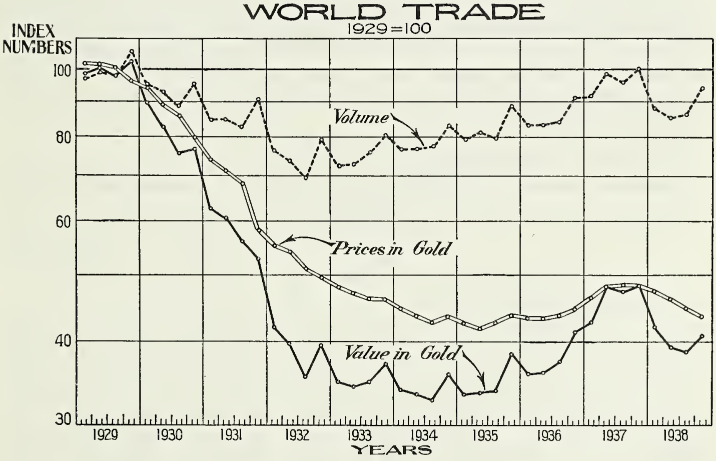
World imports and exports, on which the figures in Statement V, p. 484, are based, are taken as the sum of the recorded imports and exports of individual countries reduced to the common monetary unit of United States old gold dollars (*i.e.*, gold valued at $20·67 per fine ounce). On this basis the value of world trade increased by nearly 23 p.c. in 1937. The average prices in gold for goods entering into world trade rose by between 8 and 9 p.c. and the quantum of trade rose by about 13 p.c. and reached a level only about 3 p.c. below that of 1929. The quantum of trade declined annually from 1929 to 1932 when it had reached a level about 25 p.c. below that of 1929. Since 1932, quantum has increased each year from only slightly in 1933 to the largest increase in 1937. Average gold prices of goods comprising world trade had been declining since 1925. The annual declines were comparatively small until the end of 1929, became quite precipitous to 1932, and then tapered off to 1935, in which year they were only 42·5 p.c. of their level in 1929 or about 41 p.c. of that of 1927. The trend of gold prices turned upward in 1935 and rose quite steeply in the latter part of 1936 and first half of 1937, but declined again in the second half of 1937.

---

[*] Abbreviated from "Review of World Trade, 1937", published by the League of Nations.

The high level of world trade during 1937 was due largely to very active conditions in the early part of the year. Both gold prices and quantum declined toward the end of the year. Short crops in the Northern Hemisphere in the autumn of 1936 were a factor in higher prices of grains and foodstuffs, generally. Buoyant industrial conditions in the United States with consequent greatly increased imports provided a stimulus to production and trade throughout the world in the latter part of 1936 and the first quarter of 1937. However, thereafter a change in market conditions took place, resulting partly from the reduction in imports of raw materials by the United States on account of her declining industrial activity, although a contributory factor was the reduction in the purchases of Japan after the outbreak of her conflict with China. Armaments in Europe and Japan and capital equipment activities in most countries caused an exceptional demand for iron and steel. Trade in manufactured articles expanded, particularly on account of the great demand from raw-material countries and from the United Kingdom. The industrial countries whose exports of manufactured goods in 1937 increased were chiefly the United States, Germany, and the small industrial countries of Europe. The exports of the United Kingdom increased less because of enlarged domestic demand and those of France showed little progress.

Later monthly reports of the League of Nations indicate that the trend in both quantum and prices was decidedly downward during the early part of 1938 but levelled off in the latter part of the year.



Trade by Groups of Commodities.—The commodities that enter into world trade may be roughly divided into three groups, namely, foodstuffs, raw materials, and manufactured goods.

The estimated movement since 1929 of the proportion of total trade, average gold prices, and quantum of commodities belonging to the three groups is shown in

Statement II below. The estimates are based on information concerning five* principal trading countries representing about 41 p.c. of world trade. Foodstuffs constituted an increasing proportion of total world trade from 1929 to 1932, but have since been a declining element, so that in 1937 they constituted a smaller percentage than in 1929. The same trends have applied to manufactured goods. Raw materials, on the other hand, declined in the early years of the depression but have increased to a larger proportion in 1937 than in 1929. The average prices of raw materials fell further and more rapidly than either of the other groups. Prices of foodstuffs declined more slowly, but the decline continued longer and carried the price level almost as low as that of raw materials. Prices of both of these groups rose in 1936. Prices of manufactured goods declined still more slowly and not so far as for the other groups, but the average prices of manufactured goods for the year 1936 were still at the lowest level. Prices of all three groups rose in 1937, and prices of manufactured goods continued relatively higher than those of the other two groups although the gap was further narrowed in 1937. The quantum movements of these groups were almost the reverse of their price movements. The quantum of trade in manufactured goods declined more rapidly and to a lower point than that of either of the other groups and, although it has been rising relatively more rapidly since 1932, it was still low in 1937. The quantum of raw materials did not decline so far and in 1937 was well above the 1929 level. The quantum of foodstuffs did not drop so far as either of the other groups, but the decline continued until 1934 and the rise since then has been comparatively small.

The improvement, developing since 1932 in the barter terms of trade of agricultural and mineral-producing countries, continued, although the terms of trade of these countries had deteriorated so rapidly during the early years of the depression that they still remained lower than in the years 1925-29. Such countries reached their most advantageous position since 1929 in the first half of 1937. Declining prices of primary commodities caused a deterioration in their barter terms again toward the end of the year.

---

* United Kingdom, United States, Germany, France, and Italy.

II.—PRICE AND QUANTUM MOVEMENTS OF GROUPS OF COMMODITIES IN WORLD TRADE, 1929 AND 1932-37.

(1929=100.)

Item.	1929.	1932.	1933.	1934.	1935.	1936.	1937.
PERCENTAGE SHARE IN VALUE OF WORLD TRADE.							
Foodstuffs	24·5	29·0	26·5	25·0	24·5	24·5	23·0
Materials, raw or partly manufactured	36·0	33·0	36·0	37·0	37·5	38·0	39·0
Manufactured goods	39·5	38·0	37·5	38·0	38·0	37·5	38·0
ALL COMMODITIES	100·0	100·0	100·0	100·0	100·0	100·0	100·0
PRICE MOVEMENT (In U.S.A. old gold dollars).							
Foodstuffs	100·0	52·0	45·5	41·5	40·5	42·5	45·5
Materials, raw or partly manufactured	100·0	44·0	40·0	39·5	39·5	41·5	46·0
Manufactured goods	100·0	64·0	56·0	50·0	48·0	48·0	51·5
ALL COMMODITIES	100·0	52·4[1]	46·7[1]	43·5	42·4[1]	43·7[1]	47·5
QUANTUM MOVEMENT.							
Foodstuffs	100·0	89·0	83·0	82·0	85·5	88·0[1]	93·0
Materials, raw or partly manufactured	100·0	81·5	87·5	88·0	91·5	95·5	111·5
Manufactured goods	100·0	59·0	60·5	66·5	69·5	75·0[1]	86·0
ALL COMMODITIES	100·0	74·6[1]	75·4[1]	78·2[1]	81·8[1]	85·8[1]	96·8

[1] Revised since the publication of the 1938 Year Book.

An important factor in the buoyancy of trade in raw or partly manufactured materials, as shown in Statement II, was an exceptional demand for iron and steel in 1937. Prices of coal and raw iron continued to increase after the prices of many other industrial raw materials turned downward in the early part of 1937. The demand was due, not only to ordinary capital equipment activities which were high in the majority of countries, but also to enlarged armament programs. In certain countries, the re-orientation of imports towards metal products for armament purposes, clearly implied a reduction in the capacity for importing materials required for the production of articles of consumption.

Trade in Certain Staple Products.—A study of the trade in the major staple products throws some light upon certain of the tendencies which have recently affected the international exchange of goods.

Of important food staples, coffee was the only one of which lower quantities entered into world trade in 1937 than in 1936. The average price of all articles was higher than in 1936. The trade in wheat during the early part of 1937 was determined largely by the simultaneous failure of the 1936 crop in Canada and in several countries of Western and Central Europe and around the Mediterranean. The increase in the demand of Western and Central Europe was met largely by imports from the Argentine and certain countries of Southeastern Europe, which had the benefit of an unusually large crop. The Canadian crop of 1937 was again very low, and Canadian wheat exports, which had reached 6·6 million metric tons in 1936 fell to 2·6 millions in 1937. The improved crop of the United States, however, permitted some net exports from that country. During the four years 1933-36, the United States had been a net importer of wheat; in 1935 and 1936, her excess of imports had, indeed, been greater than that of any other country, with the exception of the United Kingdom.

The increase in quantum as well as in the price of raw materials was generally greater than in the case of foodstuffs. The quantities of mineral products entering into trade were unusually large; that of coal rose by over a fifth, and a similar or greater increase appears to have occurred in the case of mineral oils and certain metals. Trade in certain raw materials of agricultural origin was not so active; the quantity of cotton entering into trade appears to have been about the same as in 1936, while the prices fetched were lower than in that year, and the quantity of wool declined.

The high prices brought by the majority of primary products during the early part of 1937 coincided with an exceptional activity in trade. The quantum of trade in raw materials reached a record level, partly on account of purchases in anticipation of a further increase in prices. Stocks in the producing countries in many cases declined, and restrictions on the production of controlled commodities were relaxed. During the second half of 1937, on the other hand, the demand from certain countries fell off. The reduction in the United States imports of raw materials on account of her declining industrial activity was one of the principal causes of the change in market conditions, but importance should also be attributed to the reduction in purchases by Japan, where stocks of imported raw materials, accumulated during the first half of the year, were absorbed by the manufacturing industry. Improved crops in many countries increased the supply of certain agricultural products, particularly cotton. World demand for numerous commodities also remained high, however, during the latter part of 1937. The intensive activity of armament industries in many countries contributed to maintaining or even raising imports of coal, iron and steel, and base metals, and naturally also stimulated indirectly the trade in foodstuffs, and raw materials employed in the manufacture of consumption goods. The unstable political situation towards the end of 1937 and at the beginning of 1938 is known to have led to purchases by certain countries, for government or private account, of certain commodities, such as foodstuffs, metals, and mineral oils, for storage; authoritative information concerning the amount of such purchases is, however, not available. These facts help to explain why prices of certain foodstuffs, coal, certain steel products, etc., continued to rise in the second half of 1937. The decline in the prices of certain other primary products must be attributed to the fact that their production had risen disproportionately owing to the relatively high prices brought during the preceding period when demand had risen briskly, while supply in many cases had been restricted by measures of control adopted by the principal producers.

Geographic Distribution of World Trade.—In Statement III, showing the percentage distribution of world trade by continents for the period 1929-37, the figures for each continental group are the sums of those of the individual countries comprising such group and therefore include trade between the members of the group. The United Kingdom and the United States have been separated from the remainder of their respective continental groups because trade tendencies in these two principal trading countries show movements differing from those of the remainder of their continental groups. Thus while the total trade of the United Kingdom has become an increased percentage of total world trade, that of the remainder of Europe has become considerably less. The trade of the United States has declined materially as a percentage of world trade, but that of the remainder of North America (chiefly Canada), after declining during the depression, was about the same percentage in 1936 as in 1929. These trends were reversed in 1937, the trade of the United States and the smaller countries of Europe expanding more than the general average of world trade.

The movement of the figures in this statement between 1929 and 1932 on the one hand and between 1932 and 1937 on the other is naturally due largely to variations in the relative price movements; it is natural, for example, that Europe's share in world trade expanded with the improvement in the terms of trade of industrial countries (trading largely between themselves) during the first depression years, and declined during the subsequent period. But as price relationships in 1937 reverted nearly to the position of 1929, comparison between the percentage distribution of trade in these two years is not greatly affected by relative price movements and is likely to bring out the trend of events more clearly than comparisons with the intervening years.

The similarity between the years 1929 and 1937—both being, in a sense, 'boom' years and years in which the prices of primary products were relatively high—renders clear the fundamental changes in the conditions under which world trade is conducted that have taken place during the intervening years.

Imports into Europe represented a higher share in world trade in 1937 than in 1929, while the reverse is true of North America. The increase in Europe's share is due wholly to the United Kingdom, whose share in world imports represented 17·2 p.c. in 1937 as against 15·2 p.c. in 1929. The relatively high level of United Kingdom imports must undoubtedly be attributed to the fact that her net capital exports in 1929 estimated at £118,000,000, were turned into a net capital import in 1937. The rise in Africa's share in world imports between 1929 and 1937 is accounted for largely by the Union of South Africa, and is due to the relative increase in wealth brought to that country by profitable gold exports.

III.—PERCENTAGE DISTRIBUTION OF WORLD TRADE BY CONTINENTS, 1929, 1932, 1936, AND 1937.

(Basis: Recorded values in U.S.A. old gold dollars.)

Continental Group.	Imports.				Exports.				Total Trade.			
	1929.	1932.	1936.	1937.	1929.	1932.	1936.	1937.	1929.	1932.	1936.	1937.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Europe (incl. U.S.S.R.)	55·5	60·6	56·4[1]	56·2	48·8	51·1	46·3[1]	45·9	52·4	56·2	51·5[1]	51·2
United Kingdom......	*15·2*	*16·3*	*17·6*[1]	*17·2*	*10·8*	*9·9*	*10·3*	*9·9*	*13·1*	*13·2*	*14·1*	*13·6*
Other Europe.........	*40·3*	*44·3*	*38·8*[1]	*39·0*	*38·0*	*41·2*	*36·0*[1]	*36·0*	*39·3*	*43·0*	*37·4*[1]	*37·6*
North America[2].........	16·1	12·5	13·9	14·0	19·5	16·3	16·3[1]	17·1	17·7	14·2	15·1	15·5
United States.........	*12·2*	*9·5*	*10·9*	*11·0*	*15·6*	*12·2*	*11·4*	*12·7*	*13·8*	*10·8*	*11·2*	*11·8*
Other North America	*3·9*	*3·0*	*3·0*	*3·0*	*3·9*	*4·1*	*4·9*[1]	*4·4*	*3·9*	*3·4*	*3·9*	*3·7*
Latin America..........	7·7	5·4	6·6	7·1	9·6	9·1	10·1[1]	10·3	8·6	7·2	8·3	8·6
Africa..................	4·8	5·8	6·5[1]	6·3	4·5	6·7	7·6[1]	7·1	4·6	6·2	7·0[1]	6·7
Asia (excl. U.S.S.R.)...	13·2	13·7	13·7	13·7	14·9	13·7	16·1[1]	16·2	14·0	13·7	14·9[1]	14·9
Oceania..................	2·7	2·0	2·9	2·7	2·7	3·1	3·6	3·4	2·7	2·5	3·2	3·1
WORLD...........	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

[1] Revised since the publication of the 1938 Year Book.

[2] United States, Canada, Newfoundland, Greenland, St. Pierre-Miquelon.

The above analysis of trade by continental groups may be supplemented by analysing the trade of the principal political groups or empires, as in Statement IV. As in the case of the preceding statement, the figures for each group are the sums of those of the individual countries comprising the group.

The share of the British Commonwealth (including colonies, protectorates, etc., as well as the Dominions) in world trade fell from 27·9 p.c. in 1929 to 26·7 p.c. in 1931, but has since increased to 30·8 p.c. in 1936 and 29·8 p.c. in 1937. The United Kingdom herself accounts for the bulk of the rise in the share of world imports, but her share in world exports declined. Intra-Commonwealth trade was estimated at 25·7 p.c. of the total trade of the British Commonwealth in 1929 and 1931, 29·1 p.c. in 1932, 30·4 p.c. in 1935, and 30·6 p.c. in 1936. The rise from 1932 to 1937 in the share of the British Commonwealth in world trade contrasts sharply with the fall in that of the French Empire.

IV.—PERCENTAGE DISTRIBUTION OF WORLD TRADE BY POLITICAL GROUPS, 1929 1932, 1936, AND 1937.

(Basis: Recorded values in U.S.A. old gold dollars.)

Group.	Imports.				Exports.				Total Trade.			
	1929.	1932.	1936.	1937.	1929.	1932.	1936.	1937.	1929.	1932.	1936.	1937.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
British Commonwealth.	29·4	28·9	32·2	31·4	26·3	26·0	29·6	28·1	27·9	27·5	30·8[1]	29·8
United Kingdom......	*15·2*	*16·3*	*17·6*	*17·2*	*10·8*	*9·9*	*10·3*	*9·9*	*13·1*	*13·2*	*14·1*	*13·6*
Other British.........	*14·2*	*12·6*	*14·6*	*14·2*	*15·5*	*16·1*	*19·3*	*18·2*	*14·8*	*14·3*	*16·7*	*16·2*
French Empire..........	8·5	11·6	9·4	8·4	7·6	8·6	6·8	6·1	8·0	10·2	8·3[1]	7·3
Netherlands Empire....	4·8	5·3	4·3	4·7	4·6	4·9	4·7	5·0	4·7	5·1	4·4[1]	4·8
TOTALS...........	42·7	45·8	45·9	44·5	38·5	39·5	41·1	39·2	40·6	42·8	43·5	41·9
Rest of the World—												
United States.........	12·2	9·5	10·9	11·0	15·6	12·2	11·4	12·7	13·8	10·8	11·1[1]	11·8
Other countries.......	45·1	44·7	43·2	44·5	45·9	48·3	47·5	48·1	45·6	46·4	45·4[1]	46·3
TOTALS...........	57·3	54·2	54·1	55·5	61·5	60·5	58·9	60·8	59·4	57·2	56·5	58·1
GRAND TOTALS...	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0

[1] Revised since the publication of the 1938 Year Book.

As indicated on p. 480, the year 1937, when compared with 1929 (since in these two years industrial and trade conditions were active and price disparity was reduced to a minimum), offers an opportunity to consider the tendencies in world trade due to other influences. While space does not permit an exhaustive analysis of the circumstances which have determined the changes taking place, certain of the chief factors may be mentioned.

The Tendency towards Bilateralism.—The unrestricted trade of each country usually results in an export surplus with certain countries and an import surplus with other countries. In the early depression years the rather complicated structure of trade balances of this kind was seriously disturbed by the cessation of capital exports and other factors. A strong tendency to restrict triangular or multilateral trade and thus make international transactions (particularly merchandise trade) balance in each direction, has been one of the most outstanding factors in the commercial policy of numerous countries since 1931. As an equalization of the balances in certain directions entails a similar equalization in others, attempts to balance trade between two countries have sometimes had world-wide and unintentional effects.

Increased Intra-Imperial Trade.—The increase since 1929 in the United Kingdom's share in the imports as well as the exports of Australia, Canada, and New Zealand, and in the exports of India must be attributed largely to tariff preferences and other measures encouraging British intra-Commonwealth trade. Similarly, in the cases of France and Italy, the shares of overseas countries under their control in the total trade of those countries has increased, with a resultant decline in the share of such important trading countries as the United Kingdom and United States in the trade of France and Italy.

Exchange Control and Clearing Agreements.—Germany has to an increasing extent diverted her exports from industrial creditor countries to raw-material countries. One of her reasons for this has been to reserve her currency supply for the purchase of raw materials in bilateral exchange. Certain industrial creditor countries, which had endeavoured to safeguard a portion of the financial payments due to them by Germany through clearing agreements with that country, have found it necessary to restrict their exports to Germany. These exports were also curtailed by German measures taken to reduce imports of manufactured goods. The raw-material countries that have expanded their trade with Germany are principally those applying exchange control. The higher prices paid by Germany in exchange clearing have afforded a special inducement to exporters in those countries to dispose of their products in Germany but the necessity for importing German manufactured products in exchange has frequently proved uneconomical to them.

Decline of International Specialization.—International trade depends largely upon the relative advantage of the production of different types of goods in different countries. It has been frequently pointed out that protective measures aiming directly at the lessening of international specialization of production are likely to have an adverse effect upon the quantum of trade of the countries concerned and to affect the composition and geographical distribution of their trade. Less attention has been paid to the fact that measures merely interfering with the geographical distribution of trade also tend to reduce the international specialization of production. Countries with highly diversified production and exports have, as a rule, been able, without great difficulty, to adapt the geographical distribution of their trade to the influences of modern commercial policy. Countries whose production and exports are specialized in favour of one or a few articles have proved much more vulnerable. The tendency of a decline in specialization is therefore most obvious in the trade of non-industrial countries. In the case of 37 out of 45 principal raw-material producing countries for which comparable statistics of exports are available for 1929 and 1936 the share of the most important article of export in 1929 had declined in the later year, but in the case of a few of these countries there appears only to have been a shift in specialization from one article to another. However, in the great majority of cases there is evidence of an almost universal lessening in specialization of production of primary products. This tendency must not be assumed to result from restrictive or discriminatory measures alone; other important factors in the change are recent improvements in production, the enterprise shown by certain countries in starting and developing new activities, and the inevitable and ever-active shifts in world demand.

Canada's Position in World Trade.—The foregoing brief outline of the course of world trade in the period since 1929, taken from the League of Nations' reports, is presented as a background against which Canada's position in world trade may be viewed. According to these figures, Canada, in 1937, stood eighth in imports, fourth in exports, and sixth in total trade, whereas in 1929 she was fifth in each category. · The position of fourth in exports in recent years was due largely to the decline in exports of France, a decline which may be temporary. During the declining phase of the depression from 1929 to 1932, Canada's share in total world trade declined from 3·68 p.c. to 3·24 p.c. due to a great decline in the share of imports more than offsetting a slight increase in the share of exports. In the recovery phase of the depression since 1932, Canada's share in total world trade has increased to 3·6 in 1937. The share of imports was still very low although it has recovered considerably since a low point of 2·3 p.c. in 1933. Canada's share of exports has been well maintained and, with increases since 1932, is now considerably larger than in 1929. The position is shown in the first section of Statement V.

The section of Statement V showing the index of gold prices is significant as an indication of changes in the barter terms of trade for the countries shown. Canada, as a country whose imports are chiefly manufactured goods and whose exports are chiefly primary materials, experienced a greater decline from 1927 to 1932 in the average price of exports which dropped to 47·8 p.c. of the 1927 level, than of imports which were 50·8 p.c. Since 1932, export prices have become slightly higher than import prices but in this comparison it should be borne in mind that Canadian exports in the statement include domestic gold, so that the remainder of Canadian exports are under poorer barter terms than the figures indicate.

The quantum of Canadian imports has been recovering since 1932, but in 1937 it was still only 95·2 p.c. of that of 1927, was still more below that of 1929, and was below the estimated average for the world which stood at 104·3 p.c. of 1927. The quantum of Canadian exports has likewise been recovering since 1932 and made a remarkable gain in 1936, but declined in 1937, although still keeping above the levels of 1927 and 1929.

Some of the factors which especially affected Canada's trade in 1937 deserve mention. Poor grain crops in 1936 and 1937 curtailed exports of wheat, flour, and similar products. The high level of industrial activity in the United States in the first half of 1937 was a stimulus to Canadian production along many lines but especially in forest products. The general world demand and higher prices for base metals caused increases in the quantity and value of their production. Exports of gold and other precious metals were at a higher level than ever before.

V.—PERCENTAGE, PRICE, AND QUANTUM OF TRADE OF TWENTY-TWO LEADING COUNTRIES OF THE WORLD, CALENDAR YEARS 1929, 1932, 1936, AND 1937.

NOTE.—Basis: Recorded values of merchandise trade converted to U.S.A. old gold dollars. Price indexes are on the basis of old gold dollars. The year 1927 is taken as the base for both price and quantum indexes.

Item and Country.	Imports.				Exports.				Total Trade.	
	1929.	1932.	1936.	1937.	1929.	1932.	1936.	1937.	1929.	1937.
PERCENTAGE OF THE TOTAL.										
United Kingdom	15·2	16·3	17·6	17·2	10·8	9·9	10·3	9·9	13·1	13·6
United States	12·2	9·5	10·9	11·0	15·6	12·2	11·4	12·7	13·8	11·8
Germany	9·0	8·0	7·7	8·0	9·7	10·6	9·0	9·2	9·4	8·6
France	6·4	8·4	6·9	6·2	6·0	6·0	4·4	3·7	6·2	5·0
Japan	2·8	2·8	3·5	3·9	2·9	2·8	3·6	3·5	2·9	3·7
Canada[1],[2]	3·7	2·8	2·9	3·0	3·7	3·8	4·8	4·3	3·7	3·6
Belgium	2·8	3·2	3·3	3·4	2·7	3·2	3·1	3·3	2·7	3·3
Netherlands	3·1	3·8	2·9	3·1	2·4	2·7	2·2	2·4	2·8	2·8
Italy	3·2	3·0	1·9	2·7	2·4	2·7	1·8	2·1	2·8	2·4
India (incl. Burma)	2·6	2·5	2·1	2·0	3·6	2·8	3·2	3·1	3·1	2·5
Argentine	2·3	1·5	1·6	1·8	2·8	2·6	2·5	2·9	2·5	2·3
Union of South Africa[1]	1·2	1·2	2·0	1·9	1·4	2·5	2·6	2·4	1·3	2·1
Australia	2·0	1·3	2·0	1·8	1·8	2·1	2·4	2·2	1·9	2·0
Sweden	1·3	1·5	1·9	2·0	1·5	1·4	1·8	2·0	1·4	2·0
British Malaya	1·4	1·1	1·3	1·5	1·6	1·0	1·7	2·0	1·5	1·7
China (incl. Manchuria)	2·3	2·7	2·1	1·8	2·0	1·6	1·6	1·5	2·1	1·7
Czechoslovakia	1·7	1·6	1·4	1·4	1·8	1·7	1·5	1·6	1·7	1·5
Netherlands Indies	1·3	1·1	0·8	1·0	1·8	1·7	1·6	2·0	1·5	1·5
Switzerland[3]	1·5	2·4	1·7	1·5	1·2	1·2	1·2	1·1	1·3	1·3
Denmark	1·3	1·5	1·4	1·3	1·3	1·6	1·4	1·3	1·3	1·3
Brazil	1·2	0·8	1·1	1·2	1·4	1·4	1·5	1·4	1·3	1·3
U.S.S.R. (Russia)	1·3	2·6	1·2	0·9	1·4	2·3	1·3	1·3	1·4	1·1
TOTALS FOR WORLD[4]	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0
INDEX OF GOLD PRICES, (1927=100).										
United Kingdom	98·9	46·6	41·4	47·0	97·0	52·8	45·8	49·8	[5]	[5]
United States	91·6	45·3	33·6	37·3	101·2	59·3	45·3	48·1		
Germany	101·3	50·2	49·8	55·2	98·7	70·7	58·9	63·2		
France	94·0	55·2	47·0	49·0	95·8	64·9	53·4	50·0		
Japan[5]	95·1	39·7	36·3	46·2	93·3	33·0	25·0	28·0		
Canada[1],[2]	95·2	50·8	42·1	45·3[7]	94·6	47·8	44·0	48·2[7]		
Belgium	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		
Netherlands	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		
Italy	92·0	48·0	43·7	50·1	86·8	47·8	34·7	33·4		
India (incl. Burma)	93·2	46·8	38·1	[5]	90·2	39·5	34·6	[5]		
Argentine	83·1	50·4	35·1	37·6	103·5	41·2	42·7	[5]		
Union of South Africa[1]	94·3	58·1	42·4	45·1	97·8	70·7	71·2	72·3		
Australia	89·1	[5]	[5]	[5]	96·3	31·8	33·0	39·4		
Sweden	98·9	55·8	42·8	[5]	96·6	51·4	41·8	[5]		
British Malaya	93·6	48·8	36·0	[5]	92·7	28·4	42·3	[5]		
China[8]	90·7	53·1	37·4	[5]	105·8	44·4	37·1	[5]		
Czechoslovakia	94·8	59·3	52·6	54·0	97·7	70·0	[5]	[5]		
Netherlands Indies	96·9	59·2	43·7	50·0	73·2	29·0	25·0	29·0		
Switzerland[3]	96·6	63·5	48·5	[5]	102·0	75·7	61·8	[5]		
Denmark	101·0	57·3	50·2	59·3	109·9	46·9	49·2	50·2		
Brazil	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		
U.S.S.R. (Russia)	101·1	[5]	[5]	[5]	89·6	40·2	30·5	38·6		
AVERAGES FOR WORLD.[4]	96·4	51·1	41·9	46·3	96·8	50·2	42·6	45·6	96·6	45·9

For footnotes, see end of statement, p. 485.

V.—PERCENTAGE, PRICE, AND QUANTUM OF TRADE OF TWENTY-TWO LEADING COUNTRIES OF THE WORLD, CALENDAR YEARS 1929, 1932, 1936, AND 1937—concluded.

Item and Country.	Imports.				Exports.				Total Trade.	
	1929.	1932.	1936.	1937.	1929.	1932.	1936.	1937.	1929.	1937.
INDEX OF QUANTUM, (1927=100).										
United Kingdom	101·4	88·9	101·5	107·9	104·0	68·1	79·6	86·4	[5]	[5]
United States	114·8	69·8	101·8	116·7	107·1	55·9	66·2	85·1		
Germany	93·3	65·4	59·4	69·7	126·5	75·2	74·9	86·6		
France	122·0	108·3	98·0	104·0	100·7	58·9	51·2	55·4		
Japan[6]	104·9	100·9	128·3	136·5	116·2	125·0	202·4	210·8		
Canada[1],[2]	118·2	62·7	85·4	95·2[7]	96·0	78·5	115·5	105·6[7]		
Belgium	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		
Netherlands	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		
Italy	116·6	83·2	55·0	80·9	114·3	90·6	80·9	120·3		
India (incl. Burma)	103·4	81·4	79·8	[5]	108·0	74·9	107·4	[5]		
Argentine	119·6	51·8	70·9	91·9	90·2	82·7	76·4	[5]		
Union of South Africa[1]	120·6	75·7	[5]	[5]	102·0	102·1	101·5	109·6		
Australia	97·7	[5]	[5]	[5]	107·4	139·5	134·7	133·8		
Sweden	113·7	89·9	136·3	[5]	116·1	78·1	126·6	[5]		
British Malaya	[5]	[5]	[5]	[5]	94·0	77·2	86·0	[5]		
China[8]	127·8	93·0	63·3	[5]	97·0	57·1	52·8	[5]		
Czechoslovakia	[5]	[5]	[5]	[5]	104·2	52·1	[5]	[5]		
Netherlands Indies	126·8	71·9	67·9	89·7	120·1	112·3	126·8	178·4		
Switzerland[3]	110·4	107·5	88·6	[5]	101·5	50·6	58·8	[5]		
Denmark	[5]	[5]	[5]	[5]	101·9	112·5	[5]	[5]		
Brazil	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]		
U.S.S.R. (Russia)	116·0	[5]	[5]	[5]	125·6	183·5	130·4	125·1		
AVERAGES FOR WORLD[4]	109·4	81·0	93·2	104·3	108·3	81·5	93·5	106·6	108·8	105·3

[1] Includes exports of gold produced within the country. [2] Imports are adjusted for over- or under-valuation (see p. 474). Exports include exports of foreign produce. [3] Including improvement and repair trade in 1936 and 1937. [4] Totals include other countries not specified. [5] Data were not given in the Review of World Trade, 1937. [6] Indexes based on year 1928. [7] Estimated from preliminary Canadian sources. [8] Excluding Manchuria since July 1, 1932.

Subsection 2.—Historical Statistics of Canadian Trade.

The most important features of Canadian trade are reviewed historically, since Confederation in most cases, in the first nine main tables of this chapter (pp. 502-509).

A general view of the trade of Canada in the fiscal years from 1868 to 1938 is furnished in Table 1 (p. 502), giving the imports of merchandise for home consumption, dutiable and free, and the exports of Canadian and foreign produce, the total trade as here given being the aggregate of the two. Necessarily, some difficulties have been met in maintaining comparable statistics through such a length of time, one of the most serious of these arising from the different methods adopted in dealing with exports of foreign produce. For example, the shrinkage in the exports of foreign produce since 1920 has been due to change of statistical method rather than to actual diminution in value or volume of such goods exported. For the past 18 years, re-exports of foreign products from bonded warehouses have not been included in Canadian trade statistics either as imports or as exports, while the exports of foreign produce during this period have been composed of goods which had previously been entered as imports for home consumption. Such goods are debited to Canada when entering this country, and should be credited to Canada when re-exported.

From Table 2 it will be observed that, in most of the years from Confederation to the outbreak of the Great War, imports entered for consumption exceeded total exports, especially during the great growing period from 1904 to 1914. Since that time, however, there has been an annual excess of exports except in the fiscal years ended 1921, 1930, and 1931, when there were heavy return movements of funds to Canada in the form of an excess of imports.

The values of coin and bullion imported and exported are shown in Table **3** (p. 504). Exports of non-monetary gold bullion are not included in this table (see pp. 474-476).

The figures of Tables **5** and **6** (pp. 506-507) show the overwhelming predominance of the two English-speaking countries in Canada's foreign trade; in the year ended Mar. 31, 1938, for example, 77·8 p.c. of the Dominion's exports of domestic produce was shipped to these two countries, which, in the same year, together provided 79·1 p.c. of our imports for home consumption. Tables **7** and **8** show, respectively, by years, the percentage proportions of imports from the United Kingdom and the United States to totals of dutiable and free imports since 1911, and the *ad valorem* rates of duty collected on imports from these and from all countries from 1868 to 1938. The apparently higher average rate collected on imports from the United Kingdom than on those from the United States in spite of the preferential tariff accorded British goods since 1897 is explained briefly on p. 489 and in more detail at pp. 58-59 of the Condensed Preliminary Report on the Trade of Canada, 1936, and at pp. 509-510 of the 1937 Year Book.

Subsection 3.—General Analysis of Current Import and Export Trade.

The figures of Statement VI, p. 487, indicate the seriousness of the decline in trade during the depression shown by the figures for the fiscal year 1933, and the extent of the recovery since then. That the decline in the quantum or volume of trade was not so great as that of the values here shown is evident from the analyses in Subsections 1 and 10 of this chapter. The recovery from the low point of the depression has been greater in exports than in imports. Imports are an indication of purchasing power and are especially influenced by the expansion or contraction of capital expenditures within Canada. In the past, years of population growth and rapid expansion in the productive equipment of Canada have been associated with greatly increased imports, since such imports of goods provide the means by which external capital is brought into the country. Conditions for such capital imports on a large scale do not exist at present, while Canada's productive facilities provide a large volume of exports, the surplus of which represents in large measure retirements of foreign indebtedness (see Sec. 5 of this chapter, pp. 561-565).

Current trends in external trade are largely determined by conditions and policies throughout the world which influence the geographical distribution of trade, and by changes regarding the supply of, and demand for, commodities of trade in which Canada is interested. These factors are discussed as completely as space permits in Subsections 1, 6, and 7 of this Section.

The figures of exports shown in Statement VI indicate that a shift is taking place in the importance of groups in the composition of our exports. In the prosperity period, 1925-29, Canadian exports were predominantly agricultural. Indeed, in that period it was largely because bountiful harvests coincided with an active world demand at good prices that prosperity was widespread in Canada. In 1927 the two groups, vegetable and animal products, made up 59 p.c. of exports, while non-ferrous metals constituted only 6·4 p.c. In 1938, on the other hand, vegetable and animal products made up only 35 p.c. of exports, but non-ferrous metals (including gold) increased to over 27 p.c. In this connection see the text regarding principal commodities exported on p. 497.

VI.—SUMMARY OF THE TRADE OF CANADA BY MAIN GROUPS, FISCAL YEARS ENDED MAR. 31, 1914, 1927, 1933, 1937, AND 1938.

Group.	Values of Imports. $'000,000					Values of Domestic Exports. $'000,000				
	1914.	1927.	1933.	1937.	1938.	1914.	1927.	1933.	1937.	1938.
ALL COUNTRIES.										
Agricultural and Vegetable Products.....	97·6	213·1	88·3	131·4	146·3	201·2	575·0	203·4	346·5	235·3
Animals and Products	41·1	53·2	15·4	27·9	30·4	76·6	167·3	54·3	133·9	136·1
Fibres and Textiles...	109·2	183·6	61·2	104·8	108·9	1·9	7·7	4·7	12·8	14·2
Wood and Paper.....	37·4	48·0	20·5	28·9	34·2	63·2	284·1	120·9	223·9	253·4
Iron and Its Products	143·8	229·4	58·9	150·2	209·3	15·5	74·3	17·3	53·2	69·8
Non-Ferrous Metals..	35·6	52·7	18·1	37·0	47·1	53·3	82·6	96·9	230·2	292·5
Non-Metallic Minerals.................	85·3	156·8	87·7	117·0	136·7	9·3	28·9	9·2	26·1	29·3
Chemicals and Allied Products...........	17·1	31·8	25·5	33·1	36·9	4·9	16·2	11·1	19·2	20·9
Miscellaneous Commodities...........	52·1	62·2	30·8	41·6	49·3	5·7	18·1	10·3	15·4	18·7
TOTALS.........	619·2	1,030·9	406·4	671·9[1]	799·1	431·6	1,254 2	528·1	1,061·2	1,070·2
UNITED KINGDOM.										
Agricultural and Vegetable Products.....	16·2	38·3	17·4	17·9	18·5	146·8	330·1	114·2	197·1	145·3
Animals and Products	5·7	5·4	2·4	5·1	5·7	35·4	67·8	29·9	73·4	78·0
Fibres and Textiles..	60·6	72·8	25·6	46·6	50·7	0·2	0·9	1·3	2·5	3·8
Wood and Paper......	3·7	3·9	3·4	3·8	3·9	12·8	15·8	11·3	36·1	45·4
Iron and Its Products	17·3	15·0	12·0	23·0	31·1	1·4	8·1	5·6	13·0	16·5
Non-Ferrous Metals..	4·8	5·6	3·3	6·1	7·3	16·6	14·2	14·6	75·8	107·9
Non-Metallic Minerals.................	6·3	9·3	12·6	13·1	13·1	0·4	2·3	1·3	2·7	3·4
Chemicals and Allied Products...........	4·3	4·9	4·6	6·9	7·7	0·6	3·6	2·9	4·2	5·1
Miscellaneous Commodities...........	13·2	8·8	5·2	7·0	7·0	1·0	4·1	3·3	3·2	4·0
TOTALS.........	132·1	163·9	86·5	129·5	145·0	215·2	446·9	184·4	408·0	409·4
UNITED STATES.										
Agricultural and Vegetable Products.....	44·1	97·1	30·2	38·3	46·1	34·1	60·0	3·9	73·6	33·2
Animals and Products	23·3	35·4	8·6	12·6	11·6	32·3	75·3	13·9	46·4	42·6
Fibres and Textiles..	32·5	66·9	22·5	37·2	36·2	1·2	3·5	0·9	3·0	2·1
Wood and Paper.....	31·7	41·1	15·1	23·1	27·8	45·2	242·0	93·9	153·7	169·0
Iron and Its Products	121·4	206·7	43·9	121·7	170·6	2·0	10·7	2·0	6·1	6·9
Non-Ferrous Metals..	27·7	42·2	12·9	25·4	31·0	34·2	41·0	68·1	117·3	132·8
Non-Metallic Minerals.................	74·2	132·0	62·9	86·8	105·5	7·2	17·6	4·9	17·1	17·4
Chemicals and Allied Products...........	9·6	20·6	15·5	19·4	22·7	3·2	7·7	4·7	8·7	9·1
Miscellaneous Commodities...........	31·8	45·0	20·9	29·2	35·8	4·0	10·6	5·1	9·1	10·0
TOTALS.........	396·3	687·0	232·5	393·7	487·3	163·4	468·4	197·4	435·0	423·1

[1] Revised since the publication of the 1938 Year Book.

Statistical Tables of Current Trade.—Tables **10** to **18** (pp. 510-551) deal with the current trade statistics of the Dominion. Tables **10** and **11** are summary tables, showing by groups our trade with the United Kingdom, the United States, and all countries, by values and percentages, for the latest four fiscal years. Table **12** shows the same in detail for exports and Table **13**, for imports of all important commodities. Table **14** shows by main classes imports as duitable or free and exports as of Canadian or foreign produce for the five fiscal years 1934-38. Table **15** shows imports and exports for the fiscal year ended 1938 by degree of manufacture and by origin, and Table **16** gives similar information on a classification according to purpose. Table **17** gives our imports and exports for the two latest years by ports and provinces, and Table **18** shows the values imported from different countries dutiable or free under the general, preferential, and treaty rate tariffs in 1938.

Subsection 4.—Trade with the United Kingdom and the British Empire.

Trade with the United Kingdom.—Ever since Confederation the external trade of Canada has been carried on predominantly with one or other of the two great English-speaking countries, the United Kingdom and the United States (see Tables **5** and **6** of this chapter). In the early years of the Dominion, the United Kingdom, which was then lending Canada capital on a considerable scale for those times, supplied more than half her imports, though as a customer she came second to the United States. The export trade continued for some time to follow its accustomed channels to the United States, in spite of the denunciation of the Reciprocity Treaty which had expired on Mar. 17, 1866. However, partly as a result of the free trade policy of the United Kingdom and the protectionist policy of the United States, the proportion of exports tended to increase to the United Kingdom and decrease to the United States. In the '70's this proportion to the latter country, which had been over 50 p.c. in the first few years of Confederation, declined materially, but for the most part remained at over 40 p.c. until after the enactment of the McKinley Tariff of 1890 when it fell to 35 p.c. in 1892, and as low as 27 p.c. in 1898. The United Kingdom, although it had been the chief market for Canadian exports in certain years between 1874 and 1887, definitely took the lead in 1890 and steadily retained that position until 1920. During the War period the flow of goods from Canada to the United Kingdom was naturally exceptionally large. However, the United States again became the chief market in 1921 and has maintained that position continuously since 1927, except in the fiscal year 1934, when exports to the United States dropped to 34 p.c. of the total, partly due to the diversion of exports of gold to London during that year (see p. 476), and also to the industrial depression in the United States.

As already indicated, at the time of Confederation, the United Kingdom was the principal source of Canadian imports and until 1875 that country supplied half or more of the requirements. The United States took the lead in 1876 and has maintained it since 1883. Imports from that country have exceeded half the total from 1877 to 1879 and continuously since 1896, the proximity of the two countries, the increasing population on both sides of the boundary line, the common language, and the similarity of tastes and economic conditions being largely responsible. The proportion of imports coming from the United Kingdom has shown a generally declining trend since 1872, although after the enactment of the British Preference in 1897 the actual values of imports from the United Kingdom grew larger until the War. (See under the Preferential Tariff and Empire Trade below.) Even during the great growing period before the War, when large amounts of British capital were being invested in Canada, the proportion of imports from the United Kingdom tended to decline while that from the United States increased. During the Great War, when the resources of the United Kingdom were absorbed in the struggle, imports from that source were curtailed and dropped as low as 8·0 p.c. in the fiscal year 1919, while imports from the United States rose to about 82 p.c. of the total at that time. Since the War, the proportion of imports from the United Kingdom has been generally a trifle lower and that from the United States higher than in the pre-War period, although during the depression, under the influence of the Ottawa

Agreements and the suspension of imports of capital goods from the United States, the trend was reversed, apparently temporarily.

Statement VI, p. 487, shows Canada's trade with the United Kingdom in two recent years compared with that in 1933, 1927, and 1914. It may be noted that in the latest years there has been a very great decline in imports of textiles, partially compensated by some increase in imports of iron, non-metallic mineral, and chemical products. Vegetable and animal products continue to make up the major part of exports to the United Kingdom, but there has been an actual and a great proportional increase in exports of wood and paper products and non-ferrous metals.

The commodities making up Canada's export and import trade with the United Kingdom in recent years are dealt with in summary form in Tables **10** and **11**, and in detail in Tables **12** and **13** of this chapter.

The Preferential Tariff and Empire Trade.—Canada was the first of the British Dominions to grant a preference on goods the produce and manufacture of the United Kingdom and reciprocating British Dominions and possessions. This preference was extended from time to time to other portions of the British Empire until now it is applicable to practically every British Dominion and possession. In the case of Newfoundland, in addition to the preference, Canada grants free admission to fish and fish products. The British West Indies receives special concessions under the Agreement of 1925 referred to on p. 462.

The British preferential tariff enacted in 1897 has had the effect of stimulating Canada's Empire trade. When the British preference became effective in 1897, Canada's total imports from the United Kingdom amounted to only $29,401,000, compared with imports in 1887 valued at $44,741,000 and in 1873 at $67,997,000, so that from 1873 to 1897 imports from the United Kingdom declined by $38,596,000 or 56·7 p.c. After the introduction of the British preferential tariff, the downward trend in the value of imports from the United Kingdom was reversed, although the proportion of our total imports coming from the United Kingdom continued to decline. Imports from other Empire countries which were insignificant before the beginning of the century have increased both in actual value and proportion of total imports.

Average Rates of Duty under the British Preference.—Table **18** on p. 551 shows for the latest fiscal year the imports from countries of the British Empire entering Canada either at lower rates of duty or free under the preferential tariff, while Table **8**, on p. 508, shows the average *ad valorem* rates of duty on imports from the United Kingdom, United States, and all countries in each year since Confederation. The apparently higher average rate collected on imports from the United Kingdom than on those from the United States in spite of the preferential tariff accorded British goods since 1897 is due largely to the following factors: (1) imports of alcoholic beverages, which are subject to high duties, bulk largely in imports from the United Kingdom but are negligible from the United States; (2) imports of raw materials for processing in Canada, which are free of duty, form an important part of imports from the United States; and (3) dutiable imports from the United Kingdom are largely highly manufactured goods which are subject to relatively higher rates than semi-manufactured goods for further manufacture in Canada, which form another large element of imports from the United States. To make a fair comparison between the United Kingdom and the United States of the average rates of duty collected on ordinary dutiable imports, imports of alcoholic beverages and manufactured tobaccos should be eliminated, while imports free of duty under the British preference but dutiable when imported from the United States should be added to the dutiable imports from the United Kingdom. After these logical adjustments the average rate of duty on imports from the United Kingdom has been lower in every year since 1922 while the difference in favour of the United Kingdom has become 50 p.c. or more in recent years. This subject is treated in more detail at pp. 58-59 of the Condensed Preliminary Report on the Trade of Canada, 1936, and at pp. 509-510 of the 1937 Year Book.

Trade with the British Empire.—An abbreviated statistical survey of Canada's trade with the United Kingdom and the remainder of the Empire is given in Statement VII below. Empire trade has accounted for a much larger proportion of exports than of imports. The percentage of both import and export trade with the Empire, other than the United Kingdom, has shown a generally upward trend in the period covered since 1886. The industrial development of Canada draws increasing imports of raw materials from other Empire countries, which in turn provide an expanding market for her manufactured and specialized products.

For the intelligent interpretation of trends in trade over a long period such as that covered in Statement VII it is essential to bear in mind the effects of shifts in the production of commodities and in world demand, as well as fluctuations in price levels and in business cycles. These factors are discussed in connection with the principal commodities imported and exported on pp. 495-499, and also in the Review of World Trade on pp. 476-485, and should be studied in connection with the trends evidenced here.

VII.—CANADA'S TRADE WITH THE BRITISH EMPIRE.

Item and Fiscal Year.	Canadian Trade with—			Percentage of Total Trade with—		
	United Kingdom.	Other British Empire.	Total British Empire.	United Kingdom.	Other British Empire.	Total British Empire.
	$	$	$	p.c.	p.c.	p.c.
IMPORTS.						
1886	39,033,006	2,383,560	41,416,566	40·7	2·5	43·2
1896	32,824,505	2,388,647	35,213,152	31·2	2·2	33·4
1906	69,183,915	14,605,519	83,789,434	24·4	5·1	29·5
1914	132,070,406	22,456,440	154,526,846	21·4	3·6	25·0
1921	213,973,562	52,029,126	266,002,688	17·3	4·2	21·5
1922	117,135,343	31,973,910	149,109,253	15·7	4·3	20·0
1926	163,731,210	45,088,918	208,820,128	17·6	4·9	22·5
1929	194,041,381	63,346,829	257,388,210	15·3	5·0	20·3
1930	189,179,738	63,494,864	252,674,602	15·2	5·1	20·3
1933	86,466,055	33,918,269	120,384,324	21·3	8·3	29·6
1934	105,100,764	35,303,122	140,403,886	24·2	8·2	32·4
1937	129,507,885	68,657,957	198,165,842	19·3	10·2	29·5
1938	144,999,689	88,194,545	233,194,234	18·2	11·0	29·2
EXPORTS (Canadian).						
1886	36,694,263	3,262,803	39,957,066	47·2	4·2	51·4
1896	62,717,941	4,048,198	66,766,139	57·2	3·7	60·9
1906	127,456,465	10,964,757	138,421,222	54·2	4·5	58·7
1914	215,253,969	23,388,548	238,642,517	49·9	5·4	55·3
1921	312,844,871	90,607,348	403,452,219	26·3	7·6	33·9
1922	299,361,675	46,473,735	345,835,410	40·4	6·3	46·7
1926	508,237,560	90,330,435	598,567,995	38·5	6·8	45·3
1929	429,730,485	106,258,803	535,989,288	31·4	7·8	39·2
1930	281,745,965	97,825,173	379,571,138	25·2	8·7	33·9
1933	184,361,019	37,757,908	222,118,927	34·9	7·2	42·1
1934	288,582,666	50,423,723	339,006,389	43·3	7·6	50·9
1937	407,996,698	87,601,407	495,598,105	38·4	8·3	46·7
1938	409,411,682	108,027,338	517,439,020	38·2	10·1	48·3

Subsection 5.—Trade with United States and Other Foreign Countries.

For convenience of comparison and to avoid repetition, the relative importance of the United Kingdom and the United States in the trade of Canada is discussed in connection with the United Kingdom under Subsection 4, p. 488. A record of the value and proportion of trade with the United States in each year since 1868 is given in Tables **5** and **6** of this chapter, pp. 506 and 507.

The commodities of Canadian export and import trade with the United States are shown in summary form in Tables **10** and **11** and in detail in Tables **12** and **13** of this chapter.

Trade with the United States by main groups of commodities for two recent fiscal years compared with 1933, 1927, and 1914 is shown in Statement VI, p. 487. Non-metallic minerals (chiefly coal and petroleum products) and chemicals are an increasingly important factor in imports from the United States, although iron products again became the most important group in 1935 and there are still large imports of textiles which include raw cotton, and of vegetable products largely comprised of tropical or out-of-season fruits and vegetables. Aside from the effects of the Ottawa Agreements, with their purpose of increasing intra-Empire trade, and of the at-times heavy discount against Canadian funds in the United States, a factor in the fluctuation of the United States share in imports into Canada which should not be overlooked is the influence of capital expenditures here. The United States is the principal external source for machinery, equipment, and structural materials. The almost complete cessation of capital expenditures in the depression, therefore, affected imports from the United States more than from any other country, while recovery tends to cause them to rise more rapidly again.

Another important factor influencing imports from the United States is Canadian purchasing power which is very directly affected by exports to the United States. These latter were seriously curtailed by the very high rates on important Canadian products introduced by the Hawley-Smoot Tariff of June, 1930, and thereafter imports from the United States showed a greater decline than Canadian exports to that country. (See the 1936 Year Book, p. 508.)

However, this situation has been relieved by the trade agreements. The influence of the economic recovery in both Canada and the United States should not be overlooked as a factor in the recent increases of trade, while shipments of gold to the United States have augmented exports to that country.

Canadian Trade *via* the United States.—Imports from overseas countries *via* the United States have steadily declined in recent years, especially those from the British Empire. This decrease has followed: (1) general propaganda to utilize Canadian sea and river ports; (2) additional concessions to goods imported under the preferential tariff if they come direct. Provision has been made, in trade treaties and agreements negotiated with foreign countries, that goods must be imported *via* a Canadian sea or river port in order to obtain the full benefits of special rates of duty. Between 1920 and 1938 imports *via* the United States have decreased from 9·5 p.c. to 2·0 p.c. of the total imports from overseas countries.

The proportion of exports from Canada to overseas countries going *via* the United States shows a considerable decline since 1927, the percentages by fiscal years being: 1927, 39·4; 1928, 38·7; 1929, 36·6; 1930, 33·7; 1931, 27·3; 1932, 18·7; 1933, 14·2; 1934, 14·4; 1935, 17·3; 1936, 18·4; 1937, 16·5; 1938, 11·4. An important factor in the decline for recent years was the requirement of direct shipment for goods to qualify under the Empire preferences introduced in Britain, but this factor was cancelled, so far as wheat is concerned, under the United Kingdom-United States Trade Agreement which came into effect Jan. 1, 1939. Details of exports *via* the United States by countries are given in Table **21** of this chapter.

Trade with Other Foreign Countries.—The positions occupied by the United States and other foreign countries in Canada's trade in various years from 1886 to 1938 are shown in Statement VIII below. During the War and the years immediately following, when production and exports by many European countries were curtailed, imports from the United States rose to a high proportion, while those from other foreign countries declined. With this exception, the proportion of imports from other foreign countries has remained surprisingly constant, at about one-tenth to one-eighth of total imports, over the period of nearly half a century. Canadian exports to other foreign countries increased from 4·5 p.c. to as high as 24·0 p.c. in 1929 but they have declined again since then. Factors affecting these trends are referred to in the text preceding Statement VII on p. 490.

VIII.—CANADA'S TRADE WITH THE UNITED STATES AND OTHER FOREIGN COUNTRIES.

Item and Fiscal Year.	Canadian Trade with—			Percentage of Total Trade with—		
	United States.	Other Foreign Countries.	All Foreign Countries.	United States.	Other Foreign Countries.	All Foreign Countries.
	$	$	$	p.c.	p.c.	p.c.
IMPORTS.						
1886	42,818,651	11,756,920	54,575,571	44·6	12·2	56·8
1896	53,529,390	16,618,619	70,148,009	50·8	15·8	66·6
1906	169,256,452	30,694,394	199,950,846	59·6	10·9	70·5
1914	396,302,138	68,365,014	464,667,152	64·0	11·0	75·0
1921	856,176,820	117.979,374	974,156,194	69·0	9·5	78·5
1922	515,958,196	82,736,883	598,695,079	69·0	11·0	80·0
1926	608,618,542	109,890,062	718,508,604	65·6	11·9	77·5
1929	868,012,229	140,278,652	1,008,290,881	68·6	11·1	79·7
1930	847,442,037	148,156,943	995,598,980	67·9	11·8	79·7
1933	232,548,055	53,451,365	285,999,420	57·2	13·2	70·4
1934	238,187,681	55,207,058	293,394,739	54·9	12·7	67·6
1937	393,720,662	79,989,062	473,709,724	58·6	11·9	70·5
1938	487,307,784	78,567,900	565,875,684	61·0	9·8	70·8
EXPORTS (Canadian).						
1886	34,284,490	3,515,148	37,799,638	44·1	4·5	48·6
1896	37,789,481	5,152,185	42,941,666	34·4	4·7	39·1
1906	83,546,306	13,516,428	97,062,734	35·5	5·8	41·3
1914	163,372,825	29,573,097	192,945,922	37·9	6·8	44·7
1921	542,322,967	243,388,515	785,711,482	45·6	20·5	66·1
1922	292,588,643	101,816,627	394,405,270	39·5	13·8	53·3
1926	480,199,723	241,800,429	722,000,152	36·4	18·3	54·7
1929	504,161,604	328,108,239	832,269,843	36·8	24·0	60·8
1930	515,049,763	225,637,401	740,687,164	46·0	20·1	66·1
1933	197,424,723	108,520,628	305,945,351	37·4	20·5	57·9
1934	220,072,810	106,874,872	326,947,682	33·0	16·1	49·1
1937	435,014,544	130,569,257	565,583,801	41·0	12·3	53·3
1938	423,131,091	129,658,498	552,789,589	39·6	12·1	51·7

With further reference to the trade of Canada with countries other than the United Kingdom and the United States, attention is directed to Tables **14** to **45** (pp. 89-129) of the Condensed Preliminary Report on the Trade of Canada, 1938, published by the Dominion Bureau of Statistics. These tables show the trade of Canada in leading commodities with 96 British and foreign countries for the fiscal years 1937 and 1938.

Subsection 6.—Geographical Distribution of Canadian Trade by Continents and Countries.

Canadian Trade by Continents, 1938.—A summary of the imports and exports of Canada by continents for representative fiscal years since 1929 is given in Statement IX, below. The part of the table showing percentages is of particular interest as indicating trends in the distribution of trade. In connection with these trends, the influences affecting the geographical distribution of world trade as outlined on pp. 480-483 should be considered. The fiscal year 1929 was the peak year before the depression while 1933 was the lowest year. In the declining phase of the depression the percentage of imports from the United Kingdom and "Other Europe" tended to increase while that from the United States fell off very considerably. In the recovery phase since 1933 the percentage of imports from the United States has risen again, while that from "Other Europe" has declined to a much lower figure than formerly. Compared with 1929, much larger proportions of imports are now coming from Asia, Oceania, and Africa, due to increased direct imports of industrial raw materials from these continents. The restrictive measures regarding trade adopted by many European countries have greatly reduced the share of "Other Europe" in the exports of Canada while the market for Canadian goods in Oceania and Africa has expanded.

IX.—CANADA'S TRADE BY CONTINENTS, REPRESENTATIVE FISCAL YEARS 1929-38.

Item and Continent.	Values in Millions of Dollars.						Percentages of Totals.					
	1929.	1933.	1934.	1936.	1937.	1938.	1929.	1933.	1934.	1936.	1937.	1938.
IMPORTS.												
Europe	286·7	121·4	139·1	156·1	170·9	190·7	22·6	29·9	32·1	27·7	25·5	23·8
United Kingdom	*194·0*	*86·5*[1]	*105·1*	*117·9*	*129·5*	*145·0*	*15·3*	*21·3*	*24·2*	*20·9*	*19·3*	*18·1*
Other	*92·7*	*34·9*	*34·0*	*38·2*	*41·4*	*45·7*	*7·3*	*8·6*	*7·9*	*6·8*	*6·2*	*5·7*
North America	894·3	246·5	251·2	335·9	411·6	504·2	70·7	60·6	57·9	59·7	61·2	63·1
United States	*868·1*	*232·6*[1]	*238·2*	*319·5*	*393·7*	*487·3*	*68·6*	*57·2*	*54·9*	*56·8*	*58·6*	*61·0*
Other	*26·2*	*13·9*	*13·0*	*16·4*	*17·9*	*16·9*	*2·1*	*3·4*	*3·0*	*2·9*	*2·6*	*2·1*
South America	26·5	10·6	11·7	19·5	28·8	23·8	2·1	2·6	2·7	3·5	4·3	3·0
Asia	33·5	12·4	16·2	28·4	35·4	43·6	2·6	3·1	3·7	5·0	5·3	5·5
Oceania	22·5	9·1	9·7	12·8	17·5	22·3	1·8	2·2	2·3	2·3	2·6	2·8
Africa	2·2	6·4	5·9	10·0	7·7	14·5	0·2	1·6	1·3	1·8	1·1	1·8
TOTALS, IMPORTS	1,265·7	406·4[1]	433·8	562·7	671·9	799·1	100·0	100·0	100·0	100·0	100·0	100·0
EXPORTS (Canadian).												
Europe	642·8	257·1	360·9	372·7	488·3	480·6	47·0	48·7	54·2	46·0	45·0	45·0
United Kingdom	*429·7*	*184·4*	*288·6*	*321·6*	*408·0*	*409·4*	*31·4*	*34·9*	*43·3*	*37·9*	*38·4*	*38·3*
Other	*213·1*	*72·7*	*72·3*	*51·1*	*80·3*	*71·2*	*15·6*	*13·8*	*10·9*	*6·1*	*7·6*	*6·7*
North America	547·1	223·3	243·3	381·8	460·4	453·4	40·0	42·3	36·6	44·9	43·4	42·3
United States	*504·2*	*197·4*	*220·1*	*360·3*	*435·0*	*423·1*	*36·9*	*37·4*	*33·0*	*42·4*	*41·0*	*39·5*
Other	*42·9*	*25·9*	*23·2*	*21·5*	*25·4*	*30·3*	*3·1*	*4·9*	*3·6*	*2·5*	*2·4*	*2·8*
South America	32·6	6·6	7·9	12·9	13·9	19·4	2·4	1·2	1·2	1·5	1·3	1·8
Asia	88·2	22·7	26·3	28·1	36·0	43·3	6·4	4·3	3·9	3·3	3·4	4·0
Oceania	37·3	12·4	17·5	35·2	40·1	50·1	2·7	2·4	2·6	4·1	3·8	4·7
Africa	20·3	6·0	10·0	18·3	22·5	23·4	1·5	1·1	1·5	2·2	2·1	2·2
TOTALS, EXPORTS	1,368·3	528·1	665·9	849·0	1,061·2	1,070·2	100·0	100·0	100·0	100·0	100·0	100·0

[1] Revised since the publication of the 1938 Year Book.

Imports from Principal Countries.—Statement X, which follows, shows how predominant are the two great English-speaking countries as sources of supply of Canadian imports. Trade with these two leading countries is more fully covered in Subsections 4 and 5 of this Section. The percentage of imports from countries from which Canada obtains important industrial materials is tending to rise with the progress of recovery in Canada. Imports from France have been seriously affected in recent years by the unfavourable economic conditions prevailing in that country, while Germany's restrictive policy regarding trade is resulting in a declining trend in imports from that country. In Table **19** of this chapter will be found the values of imports from all important countries in recent years.

X.—PERCENTAGES OF TOTAL IMPORTS INTO CANADA FROM EACH OF TWELVE LEADING COUNTRIES, FISCAL YEARS ENDED MAR. 31, 1935-38.

NOTE.—Countries arranged in order of importance, 1938.

Rank in—				Country.	Percentages of Total Imports.				P.C. Increase or Decrease 1938 Compared with—		
1935	1936	1937	1938		1935.	1936.	1937.	1938.	1935.	1936.	1937.
1	1	1	1	United States	58·1	56·8	58·6	61·0	+ 60·5	+ 52·5	+ 23·8
2	2	2	2	United Kingdom	21·4	20·9	19·3	18·1	+ 29·8	+ 23·0	+ 11·9
15	16	5	3	British Straits Settlements	0·6	1·3	1·6	1·9	+424·8	+116·5	+ 47·9
6	5	6	4	Australia	1·2	1·3	1·4	1·5	+ 92·4	+ 67·3	+ 28·5
3	3	4	5	Germany	1·9	1·8	1·7	1·4	+ 13·8	+ 15·0	− 2·5
5	4	7	6	British India	1·2	1·3	1·2	1·2	+ 46·6	+ 26·1	+ 13·0
13	9	29	7	British South Africa	0·6	0·8	0·2	1·1	+154·6	+ 76·0	+475·3
12	8	8	8	Belgium	0·7	0·9	1·0	0·9	+106·5	+ 46·5	+ 11·4
18	17	10	9	New Zealand	0·5	0·6	0·8	0·9	+191·8	+104·2	+ 37·6
4	7	9	10	France	1·2	1·2	1·0	0·8	+ 0·7	− 3·4	+ 0·5
23	21	18	11	Ceylon	0·4	0·5	0·6	0·8	+193·8	+110·7	+ 55·2
9	18	14	12	Japan	0·8	0·6	0·7	0·7	+ 30·7	+ 66·8	+ 20·5
				Percentages of Total Imports coming from above 12 Countries	88·6	88·0	88·1	90·3	-	-	-

Exports to Principal Countries.—Percentages in Statement XI, as in the import statement, are indicative of the predominance of the United Kingdom and the United States as customers of Canada. Similarity of tastes and standards of living, as well as favourable tariff arrangements, are considerable factors in expanding exports of Canadian products to the other British dominions. Table **20** of this chapter gives actual values of Canadian exports to all important British and foreign countries for the latest five fiscal years.

XI.—PERCENTAGES OF TOTAL DOMESTIC EXPORTS FROM CANADA TO EACH OF TWELVE LEADING COUNTRIES, FISCAL YEARS ENDED MAR. 31, 1935-38.

NOTE.—Countries arranged in order of importance, 1938.

Rank in—				Country.	Percentages of Domestic Exports.				P.C. Increase or Decrease 1938 Compared with—		
1935	1936	1937	1938		1935.	1936.	1937.	1938.	1935.	1936.	1937.
1	1	1	1	United States	40·3	42·4	41·0	39·5	+ 38·9	+ 17·4	− 2·7
2	2	2	2	United Kingdom	38·4	37·9	38·4	38·3	+ 40·7	+ 27·3	+ 0·3
3	3	3	3	Australia	2·4	2·8	2·5	3·0	+ 79·3	+ 35·2	+ 20·3
4	4	5	4	Japan	2·2	1·7	2·0	2·5	+ 57·3	+ 79·5	+ 23·2
5	5	6	5	British South Africa	1·7	1·7	1·5	1·5	+ 33·3	+ 19·0	+ 3·8
9	7	8	6	New Zealand	1·0	1·2	1·1	1·5	+118·3	+ 56·8	+ 43·3
6	6	4	7	Belgium	1·5	1·3	2·2	1·4	+ 23·6	+ 31·7	− 37·9
7	8	9	8	Netherlands	1·3	1·1	1·0	1·2	+ 31·7	+ 40·5	+ 21·6
12	12	10	9	Germany	0·6	0·5	0·7	1·1	+173·9	+168·7	+ 56·5
10	10	11	10	Newfoundland	0·8	0·8	0·7	0·9	+ 45·1	+ 36·0	+ 21·5
8	9	7	11	France	1·3	0·9	1·1	0·7	− 22·7	− 0·5	− 35·1
16	14	17	12	Argentina	0·5	0·5	0·4	0·7	+ 84·8	+ 86·3	+ 99·1
				Percentages of Total Domestic Exports going to above 12 Countries	92·0	92·8	92·6	92·3	-	-	-

Subsection 7.—Principal Commodities Imported and Exported.

The commodities which make up Canada's external trade are shown in detail for the four latest fiscal years in Tables **12**, dealing with exports, and **13**, with imports, beginning on p. 512 and p. 524, respectively.

Canada's Principal Imports.—Statement XII, which follows, shows the long-term trend of principal commodities imported into Canada in the fiscal years 1890, 1900, 1910, 1920, 1930, and 1938. In the interpretation of the trends in imports, shown in this statement, the effects of price changes and of fluctuations of the so-called business cycle should be kept in mind. Thus the Bureau of Statistics' index number of wholesale prices on the 1926 base was 59·3 in the calendar year 1889, 52·1 in 1899, 59·5 in 1909, 134·0 in 1919, 95·6 in 1929, and 84·6 in 1937, these calendar years approximating to the fiscal years ended 1890, 1900, 1910, 1920, 1930, and 1938. In the matter of business fluctuations, the fiscal years 1890 and 1900 were affected by the long period of depressed commercial conditions accompanying declining price trends extending from 1872 to 1897, the fiscal year 1910 was influenced by the general development boom in Western Canada, 1920 was affected by the feverish activity which immediately followed the War, 1930 represented the end of the security inflation period and the beginning of the downturn, while in 1938, recovery, as compared with the low figures of 1933, was under way to a marked degree, both in general activity and in the level of wholesale prices.

During the period of 48 years covered by the statement, great changes have occurred in the character of the leading imports, due to developments both in the industrial organization of the country and the goods consumed by the people. Thus in 1890, many present-day leading imports, such as crude petroleum, automobiles and parts, artificial silk, electrical apparatus, and aluminium, were either non-existent or formed very insignificant items of trade. Imports of farm implements in 1890 were valued at only $161,000 but, due to the tremendous agricultural expansion in Canada since that time, as well as to increasing mechanization of agricultural operations, imports of farm implements have grown to a large item in spite of the wide development of their manufacture within the country. On the other hand, a number of the leading imports of 1890, such as woollen goods and raw wool, sugar and products, silk goods, tea, grain products, and meats, have become relatively much less important as imports. Then again, there were certain leading imports in 1890, such as coal, rolling-mill products, machinery, and fruits, which still remain among the chief items of imports owing to the absence of coal and high-grade iron ore deposits in the central portion of Canada, where population and industry are chiefly concentrated, and to the demand for fruits which cannot be grown in Canada. Owing to the industrial development of Canada since the beginning of the century. many of the leading imports are now raw materials required by Canadian industries. The quantities of a number of these raw materials imported in each year since 1911 are shown in Table **9**, p. 509.

Among the factors affecting short-term fluctuations of imports, in distinction from the long-term trends outlined above, probably the greatest is the so-called business cycle. In periods of prosperous industrial and commercial activity, when exports move freely to world markets at remunerative prices, the national income is on a correspondingly high level and the demand for imported goods in great variety expands accordingly. Especially typical of prosperity periods are large expenditures on capital improvements and upon luxuries, while in years of depression, expenditures under these two categories are eliminated or very seriously curtailed. It is, therefore, an indication of returning prosperity in Canada to find imports of machinery, rolling-mill products, electrical apparatus, farm implements, automobiles, unmanufactured wood, etc., recovering something of the relative importance among imports which they held for a few years up to 1930.

XII.—CANADA'S LEADING IMPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1938.

NOTE.—Commodities arranged in order of importance, 1938.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1938.
1	Machinery, except farm	1,877,551	5,159,952	14,690,873	36,716,791	69,702,213	48,367,372
2	Crude petroleum	[1]	23,344	1,189,081	20,306,693	50,951,202	46,634,720
3	Rolling-mill products	5,645,704	11,905,937	15,692,052	39,985,746	61,943,553	42,895,952
4	Coal	8,013,156	11,012,223	27,516,678	60,072,629	56,812,418	38,907,709
5	Automobile parts	[1]	[1]	269,586	12,674,823	35,746,929	29,725,252
6	Fruits	2,400,851	3,133,407	8,316,462	33,463,270	34,277,882	24,887,067
7	Sugar and products	6,452,654	8,610,845	14,962,770	73,618,354	27,987,156	20,663,829
8	Grain and grain products	3,034,049	8,298,884	7,806,665	9,086,073	25,082,671	19,634,814
9	Farm implements	161,277	2,148,867	2,661,207	14,578,106	30,075,453	19,245,768
10	Rubber and products	1,512,427	2,942,044	6,151,157	18,059,435	20,025,316	18,445,286
11	Raw cotton	3,539,249	4,229,198	9,384,801	33,854,457	21,682,463	17,444,618
12	Cotton goods	3,792,584	6,399,705	17,928,093	49,088,060	27,275,170	16,881,801
13	Woollen goods (incl. carpets)	10,900,600	9,427,575	20,767,010	45,545,127	32,632,927	16,192,805
14	Vegetable oils	612,671	826,882	1,872,265	15,973,417	12,244,151	15,828,491
15	Automobiles	[1]	[1]	1,732,215	15,035,545	34,464,666	15,644,461
16	Electrical apparatus	317,315	810,900	3,688,538	15,550,254	37,611,263	15,550,125
17	Books and printed matter	1,404,583	1.588,432	4,127,179	11,228,018	18,130,779	14,959,310
18	Engines and boilers	188,759	778,364	2,019,558	12,997,757	15,146,436	10,872,390
19	Flax, hemp, and jute	1,416,217	3,551,037	5,340,312	15,923,836	14,995,198	10,293,829
20	Petroleum, refined	690,283	830,025	2,326,681	10,566,692	25,180,476	10,230,528
21	Tea	3,073,643	3,604,027	5,347,854	8,336,163	10,694,379	9,846,850
22	Clay and products	948,876	1,593,255	3,418,844	6,371,567	12,256,769	9,174,600
23	Stone and products	862,037	1,029,711	1,773,953	3,687,702	8,702,988	8,629,713
24	Paper	1,208,683	1,378,749	4,567,810	9,949,574	14,764,904	7,984,806
25	Glass and glassware	1,268,314	1,658,694	2,932,104	6,926,459	10,453,706	7,792,695
26	Alcoholic beverages	1,695,161	1,938,112	4,459,566	9,135,536	45,026,487	7,429,632
27	Wool. raw	1,729,058	1,574,834	1,587,175	2,672,211	4,306,945	7,379,315
28	Noils, tops, and waste wool	12,100	151,510	599,446	5,830,957	3,833,801	6,822,248
29	Furs	1,058,001	2,106,441	5,768,075	12,877,520	11,923,949	6,821,777
30	Aluminium (chiefly ores)	159	12,543	794,490	2.747,385	6,058,864	6,431,332
31	Wood, unmanufactured	1,444,727	3,775,240	8,324,585	14,112,391	15,348,150	6,302,515
32	Vegetables	337,859	625,749	1,751,265	5,722,600	11,040,765	6,253,132
33	Leather	1,173,777	1,879,333	4,202,934	17,102,702	11.537,331	5.782,822
34	Hides and skins, raw	1,703,093	4,214,012	8,235,819	22,654,661	8,402,075	5,457,361
35	Dyeing and tanning materials	484,217	711,508	1,412,099	5,623,720	3,548,656	5,114,017
36	Wood, manufactured	1,355,230	824,195	3,085,079	7,893,284	12,711,307	4,974,550
37	Iron ore	551	282,191	3,345,550	4,601,716	5,020,921	4,817,841
38	Raw silk	193,529	277,708	393,011	3,090,845	8,360,968	4,608,688
39	Paints and varnishes	672,885	1,012,535	1,376,023	3,821,880	5,957,078	4,603,721
40	Scientific and educational equipment	205,183	371,348	1,137,140	3,282,803	4,956,519	4,356,177
41	Artificial silk	[1]	[1]	[1]	[1]	13,418,910	3,955,233
42	Coffee, green	591,158	491,148	1,194,061	4,711,079	5,924,635	3,808,373
43	Nuts, edible	231,449	400,441	1,237,292	5,889,573	5,095,109	3,696,170
44	Sulphur	44,276	215,433	430,632	1,296,458	3,823,245	3,620,728
45	Drugs and medicines	513,331	481,359	962,083	3,402,932	3,808,721	3,495,036
46	Fertilizers	14,444	88,974	5,395,423	1,796,752	5,033,592	3,458,352
47	Settlers' effects	1,810,217	3,065,410	10,273,428	10,181,034	11,181,203	3,260,276
48	Castings and forgings, iron	268,463	538,549	1,029,525	6,519,188	4,497,406	3,255,655
49	Woollen yarns	117,729	402,328	1,671,765	4,445,270	5,870,353	3,252,713
50	Brass and products	554,545	851,606	2,228,215	4,531,015	7,000,455	3,245,718
51	Cotton yarns	17,879	321,348	767,760	4,078,510	3,827,867	3,186,667
52	Seeds	478,397	1,916,994	1,167,321	4,210,782	5,061,255	2,969,214
53	Tin in blocks	266,463	580,855	1,005,467	2,662,728	2,488,074	2,906,228
54	Soda and compounds	329,084	624,873	785,524	2,982,371	4,410,621	2,825,384
55	Silk goods	2,654,505	3,880,535	3,590,829	31,341,944	19,606,589	2,665,625
56	Tools	427,305	825,541	891,820	2,050,286	3,192,449	2,625,960
57	Tubes and pipe, iron	484,008	1,122,987	2,358,848	4,160,378	5,948,162	2,546,223
58	Hardware and cutlery	1,250,369	1,434,209	1,937,647	4,210,142	4,950,119	2,476,783
59	Wire, iron	387,490	1,844,788	3,530,226	5,843,623	3,658,798	2,386,138
60	Manila, sisal, istle, etc., fibre	[1]	[1]	1,548,457	5,195,812	3,822,613	2,356,160
61	Clocks and watches	773,534	698,378	1,459,617	3,126,267	3,495,659	2,342,516
62	Cocoa and chocolate	118,569	286,363	1,130,335	7,626,745	3,651,425	2,303,951
63	Gums and resins	159,508	287,276	2,256,307	4,987,716	3,431,591	2,070,789
64	Containers (outside coverings)	456,478	609,171	2,148,076	2,233,208	6,285,755	2,034,701
65	Fish	899,683	1,060,708	1,630,744	3,491,678	3,474,921	2,010,184
66	Stamped and coated products	42,042	268,545	492,884	1,016,777	2,349,230	1,725,803

---

[1] None recorded.

XII.—CANADA'S LEADING IMPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1938—concluded.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1938.
		$	$	$	$	$	$
67	Coke	155,513	506,839	1,695,603	2,476,450	6,403,354	1,647,250
68	Toys and dolls	172,782	196,087	498,304	1,534,728	2,691,408	1,588,930
69	Animals, living	837,385	841,168	1,711,723	2,570,377	2,802,754	1,402,697
70	Butter	62,212	290,220	92,934	176,994	14,471,688	1,323,543
71	Meats	1,623,143	1,371,184	2,427,901	22,100,333	7,599,473	1,260,157
72	Diamonds, unset	110,480	451,792	1,902,710	4,470,846	3,193,871	1,237,980
73	Copper and products	484,189	1,271,270	3,488,260	8,568,035	14,898,632	1,177,881
74	Pigs and ingots, iron	1,704,563	1,293,940	3,229,055	1,754,627	2,716,924	1,131,268
75	Musical instruments	434,814	390,407	1,207,592	4,329,093	3,130,873	1,131,093
76	Celluloid in lumps	18,311	27,136	120,002	743,856	2,042,941	1,029,032
77	Plants and trees	136,326	28,510	178,470	709,507	1,913,447	1,001,989
78	Tobacco, raw	1,344,985	1,508,359	3,229,239	13,604,757	6,471,626	994,984
79	Binder twine	4,915	866,892	1,772,585	3,490,524	1,845,305	955,422
80	Nickel-plated ware	13,578	18,843	573,591	1,630,047	3,022,935	930,123
81	Spices	213,677	842,597	428,075	1,130,902	1,478,575	848,367
82	Hats and caps	1,258,409	1,637,422	3,420,609	4,216,333	2,908,340	601,654
83	Soap	148,618	446,135	813,619	1,534,082	1,316,418	527,020
84	Salt	309,840	325,433	465,253	1,336,176	897,925	483,734

[1] None recorded.

Canada's Principal Exports.—Statement XIII, which follows, gives Canada's leading domestic exports for the fiscal years ended 1890, 1900, 1910, 1920, 1930, and 1938, arranged in descending order of importance in 1938. In the interpretation of these figures of the main commodities exported, the same qualifications should apply regarding price changes and business fluctuations as cited above in the case of imports. Furthermore, factors influencing world trade, as outlined for recent years in Subsection 1, pp. 476-483, have an important bearing upon trends in Canadian exports. Since agricultural products are still an important element in Canadian exports, variations in crop conditions here and in other parts of the world cause important fluctuations in the year-to-year volume and value of exports. Among special circumstances affecting Canadian exports in the fiscal year 1938, may be mentioned poor crops in the Prairie Provinces in the autumn of 1937, further industrial recovery in the United States and other countries, and an increased demand for metals, due partly to armament programs.

Over the period of 48 years covered by the statement, the changes in Canada's exports have been very great, both in volume and in the relative importance of commodities. The great agricultural expansion of the Canadian West had scarcely begun in 1890. The leading exports then were sawmill and timber products, cheese, fish, cattle, barley, coal, and furs—indicating the large dependence of Canadian production at that time upon the eastern forests, mixed-farming areas, and fisheries. The five leading exports in 1938 were very unimportant in 1890. The year 1910 is the earliest year in which wheat appears as the leading export in the statement, although this first occurred in 1906. The rise of the great pulp and paper industry to a leading position has been still more recent, and similarly with regard to the production of non-ferrous metals, automobiles, and rubber tires. On the other hand, exports of the products of mixed-farming operations, such as cattle, hides, cheese, and butter, while showing wide fluctuations, have not expanded proportionately, and in some cases were very little or no greater in 1938 than in 1890. Much of the new agricultural area developed since 1890 has been better adapted to grain growing than to mixed-farming operations, so that, owing to the growth of population, the production of the older mixed-farming districts is to a larger extent consumed within the country. The rapid progress during the past two decades of the mining and metallurgical industries producing non-ferrous metals in Canada is illustrated in this statement by the increased importance since 1910 of exports of non-monetary gold, copper, nickel, silver, zinc, lead, aluminium, and platinum. The part played by these industries in supporting Canada's export trade has increased since 1930 with the curtailment of world trade in agricultural products. Indeed, in 1938, these great mining and metallurgical industries provided exports slightly greater than those of either the agricultural or forest resources of Canada, although agricultural exports in that year were affected by poor crops in the autumn of 1937. The direct effect of Canada's resources of water power may be traced in the statement, not only in the growth of exports of pulp and paper and of electric energy, but also in that of non-ferrous metals, artificial abrasives, and certain chemicals such as fertilizers, sodium compounds, and acids, in all of which economic production is due largely to cheap hydro-electric power.

The wide variety of exports illustrates the extent to which the Canadian economy has been broadened and strengthened since the beginning of the century. While exports are still chiefly derived from the natural resources, the products are now exported in more finished manufactured forms, and in greater variety. The increased production of minerals and the wider range of forest products have made Canadian exports more readily adaptable to changing conditions throughout the world. Furthermore, fully manufactured commodities such as automobiles, whisky, rubber goods, farm and other machinery, electrical apparatus, etc., now form important items of the list. The self-sufficiency programs with regard to food supplies of nations with dense industrial populations have had a serious effect on Canadian agriculture, but the situation for the Canadian economy at large would have been infinitely worse, had it not been for the broadened production indicated above.

XIII.—CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1938.

NOTE.—Commodities arranged in order of importance, 1938.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1938.
		$	$	$	$	$	$
1	Newsprint	[1]	[1]	2,612,243	53,640,122	145,610,519	120,007,550
2	Wheat	388,861	11,995,488	52,609,351	185,044,806	215,753,475	116,273,709
3	Gold bullion, non-monetary	[1]	[1]	[1]	[1]	4,549,459[2]	86,203,736
4	Nickel	[1]	1,040,498	3,320,054	9,039,221	25,034,975	61,918,600
5	Copper in forms	[1]	[1]	[1]	541,338	48,181	45,674,426
6	Planks and boards	17,637,308	22.015,990	33,100,387	75,216,193	49,446,887	43,662,709
7	Meats	895,767	13,615,621	8,013,680	96,161,234	15,030,671	41,362,775
8	Wood-pulp	168,180	1,816,016	5,204,597	41,383,482	44,704,958	39,960,178
9	Fish	8,099,674	10,564,688	15,179,015	40,687,172	34,767,739	26,283,313
10	Automobiles	[1]	[1]	405,011	14,883,607	35,607,645	25,299,363
11	Wheat flour	521,383	2,791,885	14,859,854	94,262,922	45.457,195	23,221,366
12	Aluminium in bars, etc	[1]	[1]	1,202,723	5,680,871	13,828,010	20,748,973
13	Whisky	25,383	396,671	1,010,657	1,504,132	25,856,136	18,828,293
14	Zinc	[1]	[1]	[1]	950,082	8,366,712	16,059,164
15	Lead	2,000	688,891	529,422	1,193,144	10,637,887	14,115,946
16	Furs, raw	1,874,327	2,264,580	3,749,005	20,628,109	18,706,311	13,998,235
17	Cattle	6,949,417	8,704,523	10,792,156	46,064,631	13,119,462	13,914,541
18	Asbestos, raw	444,159	490.909	1,886,613	8,767,856	12,074,065	13,721,394
19	Cheese	9,372,212	19,856,324	21,607,692	36,336.863	18,278,004	12,938,568
20	Pulpwood	80.005	902,772	6,076.638	8,454,863	13,860,209	12,468,821
21	Machinery, except farm	143,815	446,391	924,510	6,416.591	7,154,706	11,305,195
22	Fruits, chiefly apples	1,073,890	3,305,662	5,492.197	8.347,549	9,593,484	10,932,826
23	Farm implements	367,198	1,692,155	4,319,385	11,614,400	18,396,688	10.705,957
24	Copper ore and blister	133,251	1,387,388	6,023,925	11,871,039	37,735,413	10,317,959
25	Silver ore and bullion	201,615	1,354,053	15,009,937	14,255,601	11,569,855	9,913,475
26	Barley	4,600,409	1,010,425	1,107,732	20,206,972	10,388,735	9,550,891

---

[1] None recorded.

[2] Fiscal year 1929. There were no exports recorded for 1930.

XIII.—CANADA'S LEADING DOMESTIC EXPORTS, FISCAL YEARS 1890, 1900, 1910, 1920, 1930, AND 1938—concluded.

No.	Commodity.	1890.	1900.	1910.	1920.	1930.	1938.
		$	$	$	$	$	$
27	Rubber tires and tubes.......	[1]	[1]	[1]	7,395,172	18,153,225	8,939,396
28	Gold, raw....................	657,022	14,148,543	6,016,126	5,974,334	34,375,003	7,461,614
29	Platinum and other metals of the platinum group, in concentrates or other forms....	[1]	[1]	61,717	39,058	357,748	7,415,344
30	Fertilizers..................	4,291	51,410	371,315	6,694,037	7,990,313	6,872,394
31	Shingles, wood...............	340,872	1,131,506	2,331,443	10,848,602	6,704,494	6,430,760
32	Abrasives, artificial, crude...	[1]	[1]	[1]	1,355,084	3,775,924	6,391,033
33	Pigs, ingots and blooms, iron.	[1]	137,651	228,183	6,595.688	4,727,137	6,208,317
34	Vegetables...................	597,074	503,993	1,534,228	11,656,483	11,240,747	5,661,345
35	Paper board..................	[1]	[1]	[1]	4,568,066	2,506,496	5,424,676
36	Rubber footwear..............	[1]	[1]	129,618	1,750,967	9,986,392	5,364,969
37	Tobacco, raw.................	234	3,661	76,564	130,264	504,264	5,191,720
38	Leather, unmanufactured.....	727,087	1,535,440	1,296,480	11,742,268	6,496,951	4,885,831
39	Logs, wood...................	682,572	760,416	999,681	1,819,083	3,677,917	4,697,196
40	Sodium compounds...........	[1]	[1]	[1]	[1]	4,208,518	4,479,006
41	Electrical apparatus..........	[1]	[1]	27,743	424,474	2,521,045	4,429,148
42	Seeds........................	182,200	322,652	4,602,797	9,915,391	3,237,774	4,422,212
43	Cereal foods.................	[1]	[1]	1,689,648	1,087,901	2,431,137	4,346,935
44	Electric energy...............	[1]	[1]	[1]	[1]	4,028,154	4,080,785
45	Films........................	[1]	[1]	7,746	1,486,079	4,790,619	3,728,078
46	Milk, processed..............	[1]	[1]	541,372	8,517,771	3,262.101	3,402,267
47	Settlers' effects..............	818,001	1,095,536	2,274,005	7,631,498	6,304,199	3,311,990
48	Hides and skins, raw.........	506,402	1,396,907	5,508,185	19,762,646	7,730,914	3,272,569
49	Oatmeal and rolled oats......	254,857	474,991	1,123,861	4,283,772	2,440,968	3,155,023
50	Socks and stockings..........	[1]	[1]	[1]	[1]	826,425	3,144,547
51	Cotton products..............	108,822	471,439	442,493	6,148,697	842,588	3,077,436
52	Automobile parts.............	[1]	[1]	[1]	3,097,466	2,298,742	2,992,353
53	Doors, sashes, etc., wood.....	69,474	299,354	29,169	81,654	37,098	2,707,746
54	Malt.........................	150,380	10,939	11,328	1,320,773	64,736	2,642,114
55	Oats.........................	256,156	2,143,179	1,566,612	9,349,455	4,055,855	2,572,102
56	Timber, square...............	4,353,870	2,013,746	934,723	2,148,162	4,235,309	2,333,873
57	Acids........................	5,545	67	[1]	901,397	5,096,529	2,235,444
58	Hardware and cutlery........	84,109	278,054	100,085	7,730,826	1,743,096	2,207,824
59	Rye..........................	220,761	279,286	84,658	3,475,834	1,451,640	2,075,586
60	Bran and shorts..............	86,225	145,206	1,842,620	2.983,843	2,582,484	2,049,468
61	Scrap iron or steel............	26,172	273,840	324,516	4,300,663	1,424,071	1,929,075
62	Wrapping paper..............	[1]	[1]	9,098	2,917,197	1,655,568	1,699,929
63	Tools........................	[1]	[1]	69,301	661,651	284,800	1,561,001
64	Leather, manufactured.......	152,314	336,190	83,101	6,314,884	886,424	1,532,738
65	Brass products...............	[1]	[1]	[1]	1,644,157	2,332,962	1,512,410
66	Drugs and medicines.........	[1]	[1]	[1]	623,900	779,625	1,489,927
67	Coal.........................	2,447,936	4,599,602	5,013,221	13,183,666	3,998,692	1,434,237
68	Sugar and products...........	18,101	100,108	153,357	30,695,005	4,798,712	1,396,043
69	Shooks.......................	198,503	251,357	240,721	517,417	856,986	1,373,070
70	Soap.........................	3,733	15,959	29,224	1,000,722	731,614	1,261,210
71	Poles, telegraph and telephone	92,326	36,891	56,177	206,834	3,917,536	1,247,540
72	Petroleum products...........	15,812	1,653	1,155	1,176,644	2,527,178	1,165,661
73	Butter.......................	340,131	5,122,156	1,010,274	9,844,359	543,851	1,163,288
74	Binder twine.................	[1]	[1]	[1]	5,530,908	1,502,921	1,161,126
75	Sausage casings..............	[1]	[1]	[1]	564,222	955,933	1,151,599
76	Wool, raw....................	235,669	418,119	538,077	5,472,236	1,576,342	1,054,963
77	Paints and varnishes.........	[1]	7,599	76,807	1,625,418	503,453	1,042,670
78	Stationery...................	[1]	[1]	23,380	276,224	602,170	976,863
79	Tubes and pipe, iron..........	[1]	[1]	[1]	2,325,369	2,202,769	936,253
80	Laths, wood..................	392,500	749,301	1,882,950	3,668,511	3,095,417	871,712
81	Hay..........................	1,068,554	1,414,109	1,805,849	4,087,670	2,007,944	835,741
82	Milk and cream, fresh........	[1]	[1]	[1]	1,699,090	5,379,174	183,332
83	Ale, beer, and porter.........	10,347	6,272	2,687	144,077	1,995,990	163,062

---

[1] None recorded.

Subsection 8.—Proportions of Trade in Raw and Manufactured Products.

The stage attained in the industrial development of a country is indicated by the character of the goods it imports and exports. This is discussed as extensively as space permits in the preceding subsection. Statement XIV shows how Canada's imports and exports, analysed into the three categories of raw materials, partly manufactured goods, and fully or chiefly manufactured goods, are divided between the continents and leading countries of the world. In trade with industrialized continents, such as Europe and Asia, Canadian imports are largely manufactured goods and exports mainly raw materials or partly manufactured goods, while in trade with South America, Oceania, Africa, and North America (if the United States be excluded) the situation is the reverse. See also Table **15** of this chapter which shows the external trade classified by main groups according to origin and degree of manufacture.

XIV.—CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1938.
(Figures are preliminary.)

Continent and Country.	Imports.						Exports (Domestic).					
	Raw Materials.		Partly Manufactured.		Fully Manufactured.		Raw Materials.		Partly Manufactured.		Fully Manufactured.	
	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.
	$'000		$'000		$'000		$'000		$'000		$'000	
Europe.												
Belgium	419	5·6	1,059	14·2	5,984	80·2	12,133	83·3	1,714	11·8	716	4·9
Czechoslovakia	169	5·5	23	0·7	2,896	93·8	132	10·4	1,103	86·7	37	2·9
Denmark	36	21·7	29	17·5	101	60·8	519	57·9	173	19·3	205	22·8
France	482	7·4	429	6·6	5,578	86·0	2,646	34·8	3,983	52·3	980	12·9
Germany	1,815	15·9	333	2·9	9,249	81·2	5,777	47·1	5,511	45·0	967	7·9
Ireland (Eire)	28	56·0	[1]	–	22	44·0	4,035	78·3	226	4·4	892	17·3
Italy	763	22·7	282	8·4	2,310	68·9	602	26·5	1,560	68·7	110	4·8
Netherlands	712	20·1	676	19·0	2,159	60·9	9,303	70·1	2,366	17·8	1,600	12·1
Norway	66	9·2	18	2·5	633	88·3	5,062	75·9	551	8·2	1,059	15·9
Sweden	38	1·5	124	5·0	2,314	93·5	169	5·4	1,522	48·2	1,465	46·4
Switzerland	1	[1]	69	1·8	3,732	98·2	32	5·4	47	8·0	511	86·6
United Kingdom	11,571	8·0	15,530	10·7	117,898	81·3	137,593	33·6	133,753	32·7	138,066	33·7
Totals, Europe[2]	16,847	8·8	18,852	9·9	155,046	81·3	178,926	37·2	153,721	32·0	147,933	30·8
North America.												
Bermuda	44	60·3	1	1·3	28	38·4	502	32·5	45	2·9	998	64·6
Br. W. Indies—												
Barbados	[1]	–	1,548	49·3	1,593	50·7	85	7·0	255	21·1	871	71·9
Jamaica	2,817	49·7	2,740	48·3	111	2·0	103	2·4	142	3·2	4,142	94·4
Trinidad-Tobago	285	19·0	809	54·0	403	27·0	194	5·1	213	5·6	3,399	89·3
Other B.W.I.	588	38·6	714	46·9	222	14·5	145	7·5	118	6·1	1,668	86·4
Cuba	334	40·9	415	50·9	67	8·2	485	28·1	212	12·2	1,031	59·7
Mexico	603	95·0	[1]	–	32	5·0	131	3·8	314	9·0	3,039	87·2
Newfoundland	1,986	76·5	40	1·5	570	22·0	1,819	19·4	110	1·2	7,460	79·4
United States	144,065	29·6	25,391	5·2	317,852	65·2	90,624	21·4	170,092	40·2	162,415	38·4
Totals, North America[2]	151,601	30·0	31,665	6·3	320,938	63·7	94,367	20·8	171,607	37·8	187,466	41·4
South America.												
Argentina	4,455	85·6	4	0·1	746	14·3	1,411	19·0	39	0·5	5,970	80·5
Brazil	717	83·7	[1]	–	140	16·3	22	0·5	69·4	14·3	4,114	85·2
British Guiana	938	16·9	4,477	80·6	142	2·5	119	8·1	68	4·6	1,280	87·3
Colombia	4,616	100·0	[1]	–	1	[1]	178	12·5	16	1·1	1,236	86·4
Peru	3,441	75·8	6	0·1	1,094	24·1	9	0·7	347	28·4	868	70·9
Venezuela	2,604	100·0	[1]	–	[1]	–	15	1·1	1	0·1	1,371	98·8
Totals, South America[2]	16,855	70·9	4,547	19·1	2,362	10·0	1,782	9·2	1,290	6·7	16,294	84·1

[1] Too small to be expressed.

[2] Totals include other countries not specified.

XIV.—CANADA'S IMPORTS AND EXPORTS, BY CONTINENTS AND LEADING COUNTRIES, ACCORDING TO DEGREE OF MANUFACTURE, YEAR ENDED MAR. 31, 1938—concluded.

Continent and Country.	Imports.						Exports (Domestic).					
	Raw Materials.		Partly Manufactured.		Fully Manufactured.		Raw Materials.		Partly Manufactured.		Fully Manufactured.	
	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.	Value.	Per Cent of Total.
	$'000		$'000		$'000		$'000		$'000		$'000	
ASIA.												
British India....	985	10·5	255	2·7	8,165	86·8	25	0·6	853	19·6	3,471	79·8
Br. Str. Settlements..........	10,767	69·1	4,151	26·6	668	4·3	41	1·4	11	0·4	2,890	98·2
Ceylon...........	1,826	29·7	1,976	32·1	2,347	38·2	3	1·3	1	0·4	233	98·3
China............	1,022	30·6	942	28·2	1,377	41·2	411	12·2	1,573	46·9	1,371	40·9
Hong Kong......	381	49·4	1	0·1	390	50 5	94	4·6	222	11 0	1,709	84·4
Japan............	702	12·2	314	5·4	4,766	82·4	4,867	18·3	19,154	71·9	2,618	9·8
Philippine Is.....	454	68·6	196	29·6	12	1·8	6	0·3	16	0·9	1,840	98·8
TOTALS, ASIA[2]...	16,948	38·9	8,028	18·4	18,590	42·7	5,470	12·6	21,893	50·6	15,917	36·8
OCEANIA.												
Australia........	2,411	19·8	4,929	40·5	4,831	39·7	2,183	6·7	4,061	12·5	26,179	80·8
Fiji..............	24	0·9	2,550	98·9	4	0·2	3	0·6	210	40·5	305	58·9
New Zealand....	5,237	70·8	1,300	17·6	861	11·6	354	2·2	344	2·2	15,332	95·6
TOTALS, OCEANIA[2]	7,693	34·4	8,795	39·4	5,854	26·2	2,589	5·2	4,745	9·5	42,749	85·3
AFRICA.												
British E. Africa	2,479	75·4	759	23·1	49	1·5	1	0·1	1	0·1	920	99·8
British S. Africa	7,823	93·2	276	3·3	295	3·5	155	1·0	965	6·0	15,049	93·0
British W. Africa	1,142	72·3	438	27·7	[1]	–	145	17·6	14	1·7	663	80·7
S. Rhodesia.....	493	99·8	[1]	–	1	0·2	2	0·2	46	3·8	1,170	96·0
TOTALS, AFRICA[2].	12,530	86·7	1,527	10·6	392	2·7	1,593	6·8	1,911	8·1	19,976	85·1
GRAND TOTALS..	222,474	27·8	73,414	9·2	503,182	63·0	284,727	26·6	355,167	33·2	430,335	40·2
BRITISH EMPIRE.												
United Kingdom	11,571	8·0	15,530	10·7	117.898	81·3	137,593	33·6	133,753	32·7	138,066	33·7
Other Br. Empire	40,409	45·8	26,993	30·6	20,793	23·6	10,100	9·4	8,253	7·6	89,675	83·0
TOTALS, BRITISH EMPIRE........	51,980	22·3	42,523	18·2	138,691	59·5	147,693	28·5	142,006	27·5	227,741	44·0
FOREIGN COUNTRIES.												
United States....	144,065	29·6	25,391	5·2	317,852	65·2	90,624	21·4	170,092	40·2	162.415	38·4
Other foreign countries.......	26,429	33·6	5,500	7·0	46,639	59·4	46,410	35·8	43,070	33·2	40,178	31·0
TOTALS, FOREIGN COUNTRIES.....	170,494	30·1	30,891	5·5	364,491	64·4	137,034	24·8	213,162	38·6	202,593	36·6

[1] Too small to be expressed. [2] Totals include other countries not specified.

Subsection 9.—Main Historical Tables and Tables Showing Current Trends in External Trade.

In this subsection are assembled, in summary form, the main tables of Canadian trade since Confederation, while the figures of trade in the latest years are given in greater detail by countries and commodities.

1.—Aggregate External Merchandise Trade of Canada, fiscal years 1868-1938.

NOTE.—See explanatory text on page 485.

Fiscal Year.	Imports of Merchandise Entered for Home Consumption.			Exports of Merchandise.			Total of Imports for Home Consumption and Exports.
	Dutiable.	Free.	Total.	Canadian Produce.	Foreign Produce.	Total.	
	$	$	$	$	$	$	$
1868....	43,655,696	23,434,463	67,090,159	48,504,899	4,196,821	52,701.720	119,791,879
1869....	41,069,342	22,085,599	63,154,941	52,400,772	3,855,801	56,256,573	119,411,514
1870....	45,127,421	21,774,653	66,902,074	59,043,590	6,527,622	65,571,212	132,473,286
1871....	60,094,362	24,120,026	84,214,388	57,630,024	9,853,244	67,483,268	151,697,656
1872....	68,276,157	36,679,210	104,955,367	65,831,083	12,798,182	78,629,265	183,584,632
1873....	71,198,176	53,310,953	124,509,129	76,538,025	9,405,910	85,943,935	210,453,064
1874....	76,232,530	46,948,357	123,180,887	76,741,997	10,614,096	87,356,093	210,536,980
1875....	78,138,511	39,270,057	117,408,568	69,709,823	7,137,319	76,847,142	194,255,710
1876....	60,238,297	32,274,810	92,513,107	72,491,437	7,234,961	79,726,398	172,239,505
1877....	60,916,770	33,209,624	94,126,394	68,030,546	7,111,108	75,141,654	169,268,048
1878....	59,773,039	30,622,812	90,395,851	67,989,800	11,164,878	79,154,678	169,550,529
1879....	55,426,836	23,275,683	78,702,519	62,431,025	8,355,644	70,786,669	149,489,188
1880....	54,182,967	15,717,575	69,900,542	72,899,697	13,240,006	86,139,703	156,040,245
1881....	71,620,725	18,867,604	90,488,329	83,944,701	13,375,117	97,319,818	187,808,147
1882....	85,757,433	25,387,751	111,145,184	94,137,657	7,628,453	101,766,110	212,911,294
1883....	91,588,339	30,273,157	121,861,496	87,702,431	9,751,773	97,454,204	219,315,700
1884....	80,010,498	25,962,480	105,972,978	79,833,098	9,389,106	89,222,204	195,195,182
1885....	73,269,618	26,486,157	99,755,775	79,131,735	8,079,646	87,211,381	186,967,156
1886....	70,658,819	25,333,318	95,992,137	77,756,704	7,438,079	85,194,783	181,186,920
1887....	78,120,679	26,986,531	105,107,210	80,960,909	8,549,333	89,510,242	194,617,452
1888....	69,645,824	31,025,804	100,671,628	81,382,072	8,803,394	90,185,466	190,857,094
1889....	74,475,139	34,623,057	109,098,196	80,272,456	6,938,455	87,210,911	196,309,107
1890....	77,106,286	34,576,287	111,682,573	85,257,586	9,051,781	94,309,367	205,991,940
1891....	74,536,036	36,997,918	111,533,954	88,671,738	8,798,631	97,470,369	209,004,323
1892....	69,160,737	45,999,676	115,160,413	99,032,466	13,121,791	112,154,257	227,314,670
1893....	69,873,571	45,297,259	115,170,830	105,488,798	8,941,856	114,430,654	229,601,484
1894....	62,779,182	46,291,729	109,070,911	103,851,764	11,833,805	115,685,569	224,756,480
1895....	58,557,655	42,118,236	100,675,891	102,828,441	6,485,043	109,313,484	209,989,375
1896....	67,239,759	38,121,402	105,361,161	109,707,805	6,606,738	116,314,543	221,675,704
1897....	66,220,765	40,397,062	106,617,827	123,632,540	10,825,163	134,457,703	241,075,530
1898....	74,625,088	51,682,074	126,307,162	144,548,662	14,980,883	159,529,545	285,836,707
1899....	89,433,172	59,989,244	149,422,416	137,360,792	17,520,088	154,880,880	304,303,296
1900....	104,346,795	68,304,881	172,651,676	168,972,301	14,265,254	183,237,555	355,889,231
1901....	105,969,756	71,961,163	177,930,919	177,431,386	17,077,757	194,509,143	372,440,062
1902....	118,657,496	78,080,308	196,737,804	196,019,763	13,951,101	209,970,864	406,708,668
1903....	136,796,065	88,298,744	225,094,809	214,401,674	10,828,087	225,229,761	450,324,570
1904....	148,909,576	94,999,839	243,909,415	198,414,439	12,641,239	211,055,678	454,965,093
1905....	150,928,787	101,035,427	251,964,214	190,854,946	10,617,115	201,472,061	453,436,275
1906....	173,046,109	110,694,171	283,740,280	235,483,956	11,173,846	246,657,802	530,398,082
1907[1]...	152.065,529	98,160,306	250,225,835	180,545,306	11,541,927	192,087,233	442,313,068
1908....	218,160,047	134,380,832	352,540,879	246,960,968	16,407,984	263,368,952	615,909,831
1909....	175,014,160	113,580,036	288,594,196	242,603,584	17,318,782	259,922,366	548,516,562
1910....	227,264,346	143,053,853	370,318,199	279,247,551	19,516,442	298,763,993	669,082,192
1911....	282,723,812	170,000,791	452,724,603	274,316,553	15,683,657	290,000,210	742,724,813
1912....	335,304,060	187,100,615	522,404,675	290,223,857	17,492,294	307,716,151	830,120,826
1913....	441,606,885	229,600,349	671,207,234	355,754,600	21,313,755	377,068,355	1,048,275,589
1914....	410,258,744	208,935,254	619,193.998	431,588,439	23,848,785	455,437,224	1,074,631,222
1915....	279,792,195	176,163,713	455,955,908	409,418,836	52,023,673	461,442,509	917,398,417
1916....	289,366,527	218,834,607	508,201,134	741,610,638	37,689,432	779,300,070	1,287,501,204
1917....	461,733,609	384,717,269	846,450,878	1,151,375,768	27,835,332	1,179,211,100	2,025,661,978
1918....	542,341,522	421,191,056	963,532,578	1,540,027,788	46,142,004	1,586,169,792	2,549,702,370
1919....	526,494,658	393,217,047	919,711,705	1,216,443,806	52,321,479	1,268,765,285	2,188,476,990
1920....	693,655,165	370,872,958	1,064,528,123	1,239,492,098	47,166,611	1,286,658,709	2,351,186,832
1921....	847,561,406	392,597,476	1,240,158,882	1,189,163,701	21,264,418	1,210,428,119	2,450,587,001
1922....	495,626,323	252,178,009	747,804,332	740,240,680	13,686,329	753,927,009	1,501,731,341
1923....	537,258,782	265,320,462	802,579,244	931,451,443	13,844,394	945,295,837	1,747,875,081
1924....	591,299,094	302,067,773	893,366,867	1,045,351,056	13,412,241	1,058,763,297	1,952,130,164
1925....	516,014,455	280,918,082	796,932,537	1,069,067,353	12,294,290	1,081,361,643	1,878,294,180
1926....	583,051,670	344,277,062	927,328,732	1,320,568,147	13,344,346	1,333,912,493	2,261,241,225
1927....	659,897,013	370,995,492	1,030,892,505	1,254,168,897	15,415,636	1,269,584,533	2,300,477,038
1928....	710,050,228	398,906,238	1,108,956,466	1,233,903,994	22,248,691	1,256,152,685	2,365,109,151
1929....	821,075,430	444,603,661	1,265,679,091	1,368,259,131	25,186,403	1,393,445,534	2,659,124,625
1930....	819,230,474	429,043,108	1,248,273,582	1,120,258,302	24,679,768	1,144,938,070	2,393,211,652
1931....	574,090,230	332,522,465	906,612,695	799,742,667	17,285,381	817,028,048	1,723,640,743
1932....	388,498,048	190,005,856	578,503,904	600,031,812	11,221,215	611,253,027	1,189,756,931
1933....	256,377,100	150,006,644	406,383,744	528,064,278	6,913,842	534,978,120	941,361,864
1934....	250,476,412	183,322,213	433,798,625	665,954,071	6.311,324	672,265,395	1,106,064,020
1935....	301,245,922	221,185,231	522,431,153	756,625,925	7,658,963	764,284,888	1,286,716,041
1936....	309,933,096	252,785,967	562,719,063	849,030,417	13,441,659	862,472,076	1,425,191,139
1937....	369,933,634	301,941,932	671,875,566	1,061,181,906	13,062,314	1,074,244,220	1,746,119,786
1938....	434,165,772	364,904,146	799,069,918	1,070,228,609	14,592,595	1.084,821.204	1,883,891,122

[1] Nine months.

2.—Ratio of Exports to Imports and Values per Capita of Exports, Imports, and Total Trade, fiscal years 1868-1938.

Fiscal Year.	Excess of Imports over Total Exports.	Excess of Total Exports over Imports.	Percentage Rate of Total Exports to Imports.	Values per Capita.		
				Exports of Canadian Produce.	Total Imports.	Total Trade.[1]
	$	$	p.c.	$	$	$
1868	14,388,439	–	78·55	14·38	19·90	34·28
1869	6,898,368	–	89·07	15·35	18·50	33·85
1870	1,330,862	–	98·01	17·09	19·37	36·46
1871	16,731,120	–	80·13	16·38	23·94	40·32
1872	26,326,102	–	74·92	18·23	29·06	47·29
1873	38,565,194	–	69·03	20·87	33·94	54·81
1874	35,824,794	–	70·92	20·06	32·20	52·26
1875	40,561,426	–	64·45	17·93	30·21	48·14
1876	12,786,709	–	86·18	18·36	23·43	41·79
1877	18,984,740	–	79·83	16·97	23·45	40·42
1878	11.241,173	–	87·56	16·67	22·16	38·83
1879	7,915,850	–	89·94	15·06	18·98	34·04
1880	–	16,239,161	123·23	17·29	16·58	33·87
1881	–	6,831,489	107·05	19·36	20·86	40·22
1882	9,379,074	–	91·57	21·47	25·35	46·82
1883	24,407,292	–	79·97	19·78	27·49	47·27
1884	16,750,774	–	84·19	17·80	23·63	41·43
1885	12,544,394	–	87·42	17·43	21·98	39·41
1886	10,797,354	–	88·75	16·94	20·92	37·86
1887	15,596,968	–	85·16	17·46	22·66	40·12
1888	10,486,162	–	89·58	17·36	21·47	38·83
1889	21,187,285	–	79·93	16·94	23·02	39·96
1890	17,373,206	–	84·44	17·79	23·30	41·09
1891	14,063,585	–	87·39	18·31	23·02	41·33
1892	3,006,156	–	97·39	20·26	23·55	43·81
1893	740,176	–	99·36	21·37	23·33	44·70
1894	–	6,614,658	106·06	20·84	21·88	42·72
1895	–	8,637,593	108·58	20·43	20·00	40·43
1896	–	10,453,382	110·40	21·57	20·72	42·29
1897	–	27,839,376	126·11	24·04	20·73	44·77
1898	–	33,222,383	126·30	27·80	24·29	52·09
1899	–	5,458,464	103·65	26·12	28·41	54·53
1900	–	10,585,879	106·13	31·75	32·44	64·19
1901	–	16,578,224	109·32	32·84	33·13	65·97
1902	–	13,233,060	106·73	35·43	35·56	70·99
1903	–	134,952	100·06	37·79	39·68	77·47
1904	32,853,737	–	86·53	34·06	41·87	75·93
1905	50,492,153	–	79·96	31·85	42·05	73·90
1906	37,082,478	–	86·93	38·16	45·98	84·14
1907 (9 months)	58,138,602	–	76·77	28·65	39·70	68·35
1908	89,171,927	–	74·71	38·05	54·31	92·36
1909	28,671,830	–	90·06	36·24	43·10	79·34
1910	71,554,200	–	80·68	40·37	53·54	93·91
1911	162,724,393	–	64·06	38·06	62·82	100·88
1912	214,688,524	–	58·90	39·40	70·93	110·33
1913	294,138,879	–	56·18	47·26	89·17	136·43
1914	163,756,774	–	73·56	56·10	80·49	136·59
1915	–	5,486,601	101·20	52·08	57·99	110·07
1916	–	271,098,936	153·34	92·29	63·24	155·53
1917	–	332,760,222	139·31	140·75	103·48	244·23
1918	–	622,637,214	164·62	184·91	115·69	300·60
1919	–	349,053,580	137·95	143·48	108·48	251·96
1920	–	222,130,586	120·87	143·61	123·34	266·95
1921	29,730,763	–	97·60	135·32	141·20	276·52
1922	–	6,122,677	100·82	83·00	83·84	166·84
1923	–	142,716,593	117·78	103·39	89·09	192·48
1924	–	165,396,430	118·51	114·35	97·72	212·07
1925	–	284,429,106	135·69	115·04	85·76	200·80
1926	–	406,583,761	144·50	139·73	98·12	237·85
1927	–	238,692,028	123·22	130·14	106·97	237·11
1928	–	147,196,219	113·25	125·46	112·76	238·22
1929	–	127,766,443	110·08	136·43	126·20	262·63
1930	103,335,512	–	91·72	109·75	122·28	232·03
1931	89,584,647	–	90·12	77·08	87·37	164·45
1932	–	32,749,123	105·63	57·11	55·07	112·18
1933	–	128,549,376	131·60	49·44	38·05	87·49
1934	–	238,466,770	154·98	61·53[2]	40·08	101·61[2]
1935	–	241,853,735	146·30	69·10[2]	47·71	116·81[2]
1936	–	299,753,013	153·15	76·99[2]	51·03[2]	128·02[2]
1937	–	402,368,654	159·89	96·23	60·42[2]	156·65[2]
1938	–	285,751,286	135·76	95·43	71·86	167·29

[1] Not including exports of foreign produce.

[2] Revised since publication of the 1938 Year Book.

3.—Movement of Coin and Bullion, fiscal years 1868-1938.

NOTE.—See pp. 474-476. See also pp. 253 and 817 of the Annual Report on the Trade of Canada, 1938, for greater detail in recent years.

Fiscal Year.	Total Imports.	Exports.			Total Imports and Exports of Coin and Bullion.
		Canadian.	Foreign.	Total.	
	$	$	$	$	$
1868	4,895,147	4,866,168	Nil	4,866,168	9,761,315
1869	4,247,229	4,218,208	“	4,218,208	8,465,437
1870	4,335,529	8,002,278	“	8,002,278	12,337,807
1871	2,733,094	6,690,350	“	6,690,350	9,423,444
1872	2,753,749	4,010,398	“	4,010,398	6.764,147
1873	3,005,465	3,845,987	“	3,845,987	6,851,452
1874	4,223,282	1,995,835	“	1,995,835	6,219,117
1875	2,210,089	1,039,837	“	1,039,837	3,249,926
1876	2,220,111	1,240,037	“	1,240,037	3,460,148
1877	2,174,089	Nil	733,739	733,739	2,907,828
1878	803,726	“	168,989	168,989	972,715
1879	1,639,089	“	704,586	704,586	2,343,675
1880	1,881,807	“	1,771,755	1,771,755	3,653,562
1881	1,123,275	“	971,005	971,005	2,094,280
1882	1,503,743	“	371,093	371,093	1,874,836
1883	1,275,523	“	631,600	631,600	1,907,123
1884	2,207,666	“	2,184,292	2,184,292	4,391,958
1885	2,954,244	“	2,026,980	2,026,980	4,981,224
1886	3,610,557	“	56,531	56,531	3,667,088
1887	532,218	“	5,569	5,569	537,787
1888	2,175,472	“	17,534	17,534	2,193,006
1889	575,251	“	1,978,256	1,978,256	2,553,507
1890	1,083,011	“	2,439,782	2,439,782	3,522,793
1891	1,811,170	129,328	817,599	946,927	2,758,097
1892	1,818,530	306,447	1,502,671	1,809,118	3,627,648
1893	6,534,200	309,459	3,824,239	4,133,698	10,667,898
1894	4,023,072	310,006	1,529,374	1,839,380	5,862,452
1895	4,576,620	256,571	4,068,748	4,325,319	8,901,939
1896	5,226,319	207,532	4,491,777	4,699,309	9,925,628
1897	4,676,194	327,298	3,165,252	3,492,550	8,168,744
1898	4,390,844	1,045,723	3,577,415	4,623,138	9,013,982
1899	4,629,177	1,101,245	2,914,780	4,016,025	8,645,202
1900	8,152,640	1,670,068	6,987,100	8,657,168	16,809,808
1901	3,307,069	Nil	1,978,489	1,978,489	5,285,558
1902	6,053,791	“	1,669,422	1,669,422	7,723,213
1903	8,695,707	“	619,963	619,963	9,315,670
1904	7,554,917	“	2,465,557	2,465,557	10,020,474
1905	9,961,340	“	1,844,811	1,844,811	11,806,151
1906	6,620,527	“	9,928,828	9,928,828	16,549,355
1907 (9 months)	7,029,047	“	13,189,964	13,189,964	20,219,011
1908	5,887,737	“	16,637,654	16,637,654	22,525,391
1909	9,611,761	2	1,589,791	1,589,793	11,201,554
1910	5,514,817	Nil	2,594,536	2,594,536	8,109,353
1911	9,226,715	“	7,196,155	7,196,155	16,422,870
1912	25,077,515	“	7,601,099	7,601,099	32,678,614
1913	4,309,811	“	16,163,702	16,163,702	20,473,513
1914	14,498,451	1,219	23,559,485	23,560,704	38,059,155
1915	131,483,396	667	29,365,701	29,366,368	160,849,764
1916	33,876,227	315	103,572,117	103,572,432	137,448,659
1917	26,986,548	86,087	196,460,961	196,547,048	223,533,596
1918	11,290,341	290,281	3,201,122	3,491,403	14,781,744
1919	[1]	[1]	[1]	[1]	[1]
1920	50,463,494	230,117	49,815,279	50,045,396	100,508,890
1921	7,218,775	24,368,846	9,815,827	34,184,673	41,403,448
1922	4,788,246	18,085,901	5,251,430	23,337,331	28,125,577
1923	26,455,231	1,766,060	25,782,806	27,548,866	54,004,097
1924	3,496,705	12,521,619	12,924,211	25,445,830	28,942,535
1925	4,142,292	2,948,353	1,971,620	4,919,973	9,062,265
1926	51,437,859	40,668,052	25,242,303	65,910,355	117,348,214
1927	46,086,458	Nil	43,040,819	43,040,819	89,127,277
1928	31,308,807	25,301,005	31,031,311	56,332,316	87,641,123
1929	29,560,310	32,383,006	58,299,998	90,683,004	120,243,314
1930	2,716,218	410,435	4,494,783	4,905,218	7,621,436
1931	39,126,924	80	44,996,512	44,996,592	84,123,516
1932	1,815,016	25,291,905	22,860,214	48,152,119	49,967,135
1933	1,011,685	3,876,674	6,842,342	10,719,016	11,730,701
1934	849,290	12,452,653	2,749,629	15,202,282	16,051,572
1935	730,612	28,196	803,782	831,978	1,562,590
1936	1,281,141	51,957	14,498,433	14,550,390	15,831,531
1937	1,730,895	59,178	1,785,452	1,844,630	3,575,525
1938	1,361,578	59,323	41,879,503	41,938,826	43.300,404

[1] No record of imports and exports of coin and bullion for 1919.

4.—Duties Collected on Exports, 1868-92, and on Imports for Home Consumption, 1868-1938, with Percentages of Expense of Collection to Gross Customs Revenue Collected, fiscal years 1868-1938.

Note.—Duties on exports were not collected after the year 1892. The figures in this table are the gross figures of duties collected; the net national revenue from customs taxation, because of the drawbacks paid where commodities on which duties have been collected are afterwards exported in a more highly manufactured state, is considerably smaller. For net customs revenue, see statistics of revenue from customs duties, in the historical revenue table in Chapter XXI on Public Finance.

Fiscal Year.	Duties Collected on Exports.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Exports.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.
	$	$	p.c.		$	$	p.c.
1868	17,986	8,801,446	5·99	1881	8,141	18,492,645	3·87
1869	14,403	8,284,507	7·09	1882	8,810	21,700,028	3·33
1870	37,912	9,425,028	5·41	1883	9,756	23,162,553	3·26
1871	36,066	11,807,590	4·21	1884	8,515	20,156,448	3·96
1872	24,809	13,020,684	4·04	1885	12,305	19,121,254	4·14
1873	20,152	12,997,578	4·35	1886	20,726	19,427,398	4·10
1874	14,565	14,407,318	4·55	1887	31,397	22,438,309	3·64
1875	7,243	15,354,139	4·44	1888	21,772	22,187,869	3·81
1876	4,500	12,828,614	5·61	1889	42,207	23,742,317	3·62
1877	4,103	12,544,348	5·75	1890	93,674	23,921,234	3·63
1878	4,161	12,791,532	5·58	1891	64,803	23,416,266	3·83
1879	4,272	12,935,269	5·56	1892	108	20,550,474	4·39
1880	8,896	14,129,953	5·04				

Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.	Fiscal Year.	Duties Collected on Imports.	Percentage of Expense of Collection to Gross Customs Revenue.
	$	p.c.		$	p.c.		$	p.c.
1893	21,161,711	4·26	1909	48,059,792	4·15	1924	135,122,345	2·49
1894	19,379,822	4·75	1910	61,024,239	3·31	1925	120,222,454	3·09
1895	17,887,269	5·13	1911	73,312,368	2·98	1926	143,933,111	2·83
1896	20,219,037	4·43	1912	87,576,037	2·78	1927	158,966,367	2·66
1897	19,891,997	4·73	1913	115,063,688	2·74	1928	171,872,768	3·09
1898	22,157,788	4·37	1914	107,180,578	3·59	1929	200,479,505	3·02
1899	25,734,229	4·02	1915	79,205,910[1]	4·77	1930	199,011,628	3·30
1900	28,889,110	3·71	1916	103,940,101[1]	3·55	1931	149,250,992	4·45
1901	29,106,980	3·86	1917	147,631,455[1]	2·54	1932	113,997,851	4·87
1902	32,425,532	3·62	1918	161,595,629[1]	2·51	1933	77,271,965	3·86
1903	37,110,355	3·31	1919	158,046,334[1]	3·13	1934	73,154,472	3·37
1904	40,954,349	3·31	1920	187,524,182[1]	2·49	1935	84,627,473	2·97
1905	42,024,340	3·49	1921	179,667,683[1]	3·36	1936	82,784,317	3·20
1906	46,671,101	3·31	1922	121,487,394[1]	3·22	1937	92,282,059[3]	2·71
1907[2]	40,290,172	3·04	1923	133,803,370[1]	2·58	1938	103,719,952	2·48
1908	58,331,074	3·30						

[1] Includes War tax. [2] Nine months. [3] Revised since publication of the 1938 Year Book.

5.—Exports to the United Kingdom, to the United States, and to Other Countries, of Merchandise the Produce of Canada, fiscal years 1868-1938.

Fiscal Year.	Exports to United Kingdom.	P.C. Canadian Exports to U.K. to Total Canadian Exports.	Exports to United States.	P.C. Canadian Exports to U.S. to Total Canadian Exports.	Exports to Other Countries.	Total Exports of Canadian Produce.
	$	p.c.	$	p.c.	$	$
1868	17,905,808	36·9	25,349,568	52·3	5,249,433	48,504,809
1869	20,486,389	39·1	26,717,656	51·0	5,196,727	52,400,772
1870	22,512,991	38·1	30,361,328	51·4	6,169,271	59,043,590
1871	21,733,556	37·7	29,164,358	50·6	6,732,110	57,630,024
1872	25,223,785	38·3	32,871,496	49·9	7,735,802	65,831,083
1873	31,402,234	41·0	36,714,144	48·0	8,421,647	76,538,025
1874	35,769,190	46·6	33,195,805	43·3	7,777,002	76,741,997
1875	34,199,134	49·1	27,902,748	40·0	7,607,941	69,709,823
1876	34,379,005	47·4	30,080,738	41·5	8,031,694	72,491,437
1877	35,491,671	52·2	24,326,332	35·8	8,212,543	68,030.546
1878	35,861,110	52·7	24,381,009	35·9	7,747,681	67,989,800
1879	29,393,424	47·1	25,491,356	40·8	7,546,245	62,431,025
1880	35,208,031	48·3	29,566,211	40·6	8,125,455	72,899,697
1881	42,637,219	50·8	34,038,431	40·5	7,269,051	83,944,701
1882	39,816,813	42·3	45,782,584	48·6	8,538,260	94,137,657
1883	39,538,067	45·1	39,513,225	45·1	8,651,139	87,702,431
1884	37,410,870	46·9	34,332,641	43·0	8,089,587	79,833,098
1885	36,479,051	46·1	35,566,810	44·9	7,085,874	79,131,735
1886	36,694,263	47·2	34,284,490	44·1	6,777,951	77,756,704
1887	38,714,331	47·8	35,269,922	43·6	6,976,656	80,960,909
1888	33,648,284	41·3	40,407,483	49·6	7,326,305	81,382,072
1889	33,504,281	41·7	39,519,940	49·2	7,248,235	80,272,456
1890	41,499,149	48·7	36,213,279	42·5	7,545,158	85,257,586
1891	43,243,784	48·8	37,743,430	42·6	7,684,524	88,671,738
1892	54,949,055	55·5	34,666,070	35·0	9,417,341	99,032,466
1893	58,409,606	55·4	37,296,110	35·4	9,783,082	105,488,798
1894	60,878,056	58·6	32,562,509	31·4	10,411,199	103,851,764
1895	57,903,564	56·3	35,603,863	34·6	9,321,014	102,828,441
1896	62,717,941	57·2	37,789,481	34·4	9,200,383	109,707,805
1897	69,533,852	56·2	43,664,187	35·3	10,434,501	123,632,540
1898	93,065,019	64·4	38,989,525	27·0	12,494,118	144,548,662
1899	85,113,681	62·0	39,326,485	29·0	12,920.626	137,360,792
1900	96,562,875	57·1	57,996,488	34·2	14,412,938	168,972,301
1901	92,857,525	52·3	67,983,673	38·3	16,590.188	177,431,386
1902	109,347,345	55·8	66,567,784	34·0	20,104,634	196,019,763
1903	125,199,980	58·4	67,766,367	31·6	21,435,327	214,401.674
1904	110,120,892	55·5	66,856,885	33·7	21,436,662	198,414,439
1905	97,114,867	50·9	70,426,765	36·9	23,313,314	190,854,946
1906	127,456,465	54·1	83,546,306	35·5	24,481,185	235,483,956
1907 (9 months)	98,691,186	54·7	62,180,439	34·4	19,673,681	180,545,306
1908	126,194,124	51·1	90,814,871	36·8	29,951,973	246,960,968
1909	126,384,724	52·1	85,334,806	35·2	30,884,054	242,603,584
1910	139,482,945	50·0	104,199,675	37·3	35,564,931	279,247,551
1911	132,156,924	48·2	104,115,823	38·0	38,043,806	274,316,553
1912	147,240,413	50·7	102,041,222	35·2	40,942,222	290,223,857
1913	170,161,903	47·8	139,725,953	39·3	45,866,744	355,754,600
1914	215,253,969	49·9	163,372,825	37·9	52,961,645	431,588,439
1915	186,668,554	45·6	173,320,216	42·3	49,430,066	409,418,836
1916	451,852,399	60·9	201,106,488	27·1	88,651.751	741,610.638
1917	742,147,537	64·5	280,616,330	24·4	128,611,901	1,151,375,768
1918	845,480,069	54·9	417,233,287	27·0	277,314,432	1,540,027,788
1919	540,750,977	44·5	454,873,170	37·4	220,819,659	1,216,443.806
1920	489,152,637	39·5	464,028,183	37·4	286,311,278	1,239,492,098
1921	312,844,871	26·3	542,322,967	45·6	333,995,863	1,189,163,701
1922	299,361,675	40·4	292,588,643	39·5	148,290,362	740,240,680
1923	379,067,445	40·7	369,080,218	39·6	183,303,780	931,451,443
1924	360,057,782	34·4	430,707,544	41·2	254,585,730	1,045,351,056
1925	395,843,433	37·0	417,417,144	39·0	255,806,776	1,069,067,353
1926	508,237,560	38·5	480,199,723	36·4	332,130,864	1,320,568,147
1927	446,872,851	35·6	468,434,180	37·3	338,861,866	1,254,168,897
1928	410,691,392	33·3	483,700,034	39·2	339,512,568	1,233,903,994
1929	429,730,485	31·4	504,161,604	36·8	434,367,042	1,368,259,131
1930	281,745,965	25·1	515,049,763	46·0	323,462,574	1,120,258,302
1931	219,246,499	27·4	349,660,563	43·7	230,835,605	799,742,667
1932	174,043,725	29·0	257,770,160	42·9	168,217,927	600,031,812
1933	184,361,019	34·9	197,424,723	37·4	146,278,536	528,064,278
1934	288,582,666	43·3	220,072,810	33·0	157,298,595	665,954,071
1935	290,885,237	38·4	304,721,354	40·3	161,019,334	756,625,925
1936	321,556,798	37·9	360,302,426	42·4	167,171,193	849,030,417
1937	407,996,698	38·4	435,014,544	41·0	218,170,664	1,061,181,906
1938	409,411,682	38·3	423,131,091	39·5	237,685.836	1,070,228,609

6.—Imports from the United Kingdom, from the United States, and from Other Countries, of Merchandise Entered for Home Consumption, fiscal years 1868-1938.

Fiscal Year.	Imports from United Kingdom.	Per cent Imports from U.K. to Total Imports.	Imports from United States.	Per Cent Imports from U.S. to Total Imports.	Imports from Other Countries.	Total Imports for Home Consumption.
	$	p.c.	$	p.c.	$	$
1868	37,617,325	56·1	22,660,132	33·8	6,812,702	67,090,159
1869	35,496,764	56·2	21,497,380	34·0	6,160,797	63,154,941
1870	37,537,095	56·1	21,697,237	32·4	7,667,742	66,902,074
1871	48,498,202	57·6	27,185,586	32·3	8,530,600	84,214,388
1872	62,209,254	59·7	33,741,995	32·1	9,004,118	104,955,367
1873	67,996,945	54·6	45,189,110	36·3	11,323,074	124,509,129
1874	61,424,407	49·9	51,706,906	42·0	10,049,574	123,180,887
1875	60,009,084	51·1	48,930,358	41·7	8,469,126	117,408,568
1876	40,479,253	43·8	44,099,880	47·7	7,933,974	92,513,107
1877	39,331,621	41·8	49,376,008	52·5	5,418,765	94,126,394
1878	37,252,769	41·2	48,002,875	53·1	5,140,207	90,395,851
1879	30,967,778	39·3	42,170,306	53·6	5,564,435	78,702,519
1880	33,764,439	48·3	28,193,783	40·3	7,942,320	69,900,542
1881	42,885,142	47·4	36,338,701	40·6	11,264,486	90,488,329
1882	50,356,268	45·3	47,052,935	42·3	13,735,981	111,145,184
1883	51,679,762	42·4	55,147,243	45·3	15,034,491	121,861,496
1884	41,925,121	39·6	49,785,888	47·0	14,261,969	105,972,978
1885	40,031,448	40·1	45,576,510	45·7	14,147,817	99,755,775
1886	39,033,006	40·7	42,818,651	44·6	14,140,480	95,992,137
1887	44,741,350	42·6	44,795,908	42·6	15,569,952	105,107,210
1888	39,167,644	38·9	46,440,296	46·1	15,063,688	100,671,628
1889	42,251,189	38·7	50,029,419	45·9	16,817,588	109,098,196
1890	43,277,009	38·8	51,365,661	46·0	17,039,903	111,682,573
1891	42,018,943	37·7	52,033,477	46·7	17,481,534	111,533,954
1892	41,063,711	35·7	51,742,132	44·9	22,354,570	115,160,413
1893	42,529,340	36·9	52,339,796	45·4	20,301,694	115,170,830
1894	37,035,963	34·0	50,746,091	46·5	21,288,857	109,070,911
1895	31,059,332	30·9	50,179,004	49·8	19,437,555	100,675,891
1896	32,824,505	31·2	53,529,390	50·8	19,007,266	105,361,161
1897	29,401,188	27·6	57,023,342	53·5	20,193,297	106,617,827
1898	32,043,461	25·4	74,824,923	59·2	19,438,778	126,307,162
1899	36,966,552	24·7	88,506,881	59·2	23,948,983	149,422,416
1900	44,280,041	25·7	102,224,917	59·2	26,146,718	172,651,676
1901	42,820,334	24·1	107,377,906	60·3	27,732,679	177,930,919
1902	49,022,726	25·0	115,001,533	58·4	32,713,545	196,737,804
1903	58,793,038	26·2	129,071,197	57·3	37,230,574	225,094,809
1904	61,724,893	25·3	143,329,697	58·7	38,854,825	243,909,415
1905	60,342,704	24·0	152,778,576	60·6	38,842,934	251,964,214
1906	69,183,915	24·4	169,256,452	59·6	45,299,913	283,740,280
1907 (9 months)	64,415,756	25·8	149,085,577	59·5	36,724,502	250,225,835
1908	94,417,320	26·8	205,309,803	58·2	52,813,756	352,540,879
1909	70,682,600	24·5	170,432,360	59·0	47,479,236	288,594,196
1910	95,337,058	25·8	218,004,556	58·9	56,976,585	370,318,199
1911	109,934,753	24·3	275,824,265	60·8	66,965,585	452,724,603
1912	116,906,360	22·4	331,384,657	63·4	74,113,658	522,404,675
1913	138,742,644	20·7	436,887,315	65·0	95,577,275	671,207,234
1914	132,070,406	21·4	396,302,138	64·0	90,821,454	619,193,998
1915	90,157,204	19·8	297,142,059	65·2	68,656,645	455,955,908
1916	77,404,361	15·2	370,880,549	73·0	59,916,224	508,201,134
1917	107,096,735	12·7	665,312,759	78·6	74,041,384	846,450,878
1918	81,324,283	8·4	792,894,957	82·3	89,313,338	963,532,578
1919	73,035,118	8·0	750,203,024	81·6	96,473,563	919,711,705
1920	126,362,631	11·9	801,097,318	75·3	137,068,174	1,064,528,123
1921	213,973,562	17·3	856,176,820	69·0	170,008,500	1,240,158,882
1922	117,135,343	15·7	515,958,196	69·0	114,710,793	747,804,332
1923	141,330,143	17·6	540,989,738	67·4	120,259,363	802,579,244
1924	153,586,690	17·2	601,256,447	67·3	138,523,730	893,366,867
1925	151,083,946	19·0	509,780,009	64·0	136,068,582	796,932,537
1926	163,731,210	17·6	608,618,542	65·6	154,978,980	927,328,732
1927	163,939,065	15·9	687,022,521	66·6	179,930,919	1,030,892,505
1928	186,435,824	16·7	718,896,270	64·9	203,624,372	1,108,956,466
1929	194,041,381	15·3	868,012,229	68·6	203,625,481	1,265,679,091
1930	189,179,738	15·2	847,442,037	67·9	211,651,807	1,248,273,582
1931	149,497,392	16·5	584,407,018	64·5	172,708,285	906,612,695
1932	106,371,779	18·4	351,686,775	60·8	120,445,350	578,503,904
1933	86,466,055	21·3	232,548,055	57·2	87,369,634	406,383,744
1934	105,100,764	24·2	238,187,681	54·9	90,510,180	433,798,625
1935	111,682,490	21·4	303,639,972	58·1	107,108,691	522,431,153
1936	117,874,822	20·9	319,479,594	56·8	125,364,647	562,719,063
1937	129,507,885	19·3	393,720,662	58·6	148,647,019	671,875,566
1938	145,008,771	18·1	487,279,507	61·0	166,781,640	799,069,918

7.—Percentage Proportions of Imports from the United Kingdom and the United States, respectively, to Totals of Dutiable and Free, fiscal years 1911-38.

NOTE.—For the years 1868 to 1910, see Canada Year Book, 1927-28, p. 499.

Fiscal Year.	United Kingdom.			United States.		
	Dutiable to Total Dutiable.	Free to Total Free.	Per Cent of All Imports.	Dutiable to Total Dutiable.	Free to Total Free.	Per Cent of All Imports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1911	29·82	15·05	24·34	54·14	72·05	60·84
1912	26·69	14·72	22·42	58·72	71·74	75·37
1913	24·47	13·43	20·71	62·57	69·78	65·03
1914	24·95	14·26	21·35	60·81	70·16	63·96
1915	24·31	12·61	19·79	60·27	72·85	65·13
1916	17·97	11·63	15·24	68·93	78·29	72·95
1917	16·35	8·24	12·67	71·91	86·59	78·57
1918	10·70	5·54	8·45	79·61	86·29	82·27
1919	9·50	5·90	7·97	79·10	84·74	81·50
1920	13·44	8·93	11·87	72·04	81·26	75·25
1921	20·07	11·17	17·25	64·19	79·51	69·04
1922	19·20	8·72	15·66	62·97	80·88	69·02
1923	21·61	9·49	17·61	61·85	78·66	67·41
1924	21·32	9·12	17·19	60·20	81·21	67·30
1925	24·16	9·40	18·96	55·63	79·36	64·00
1926	22·83	8·89	17·65	57·97	78·94	65·76
1927	20·44	7·81	15·90	59·52	79·53	66·73
1928	21·13	8·98	16·76	58·59	76·06	64·87
1929	18·82	8·91	15·34	63·82	77·40	68·56
1930	18·14	9·45	15·16	63·88	75·55	67·89
1931	18·91	12·31	16·49	62·65	67·59	64·46
1932	20·51	14·04	18·39	59·11	64·23	60·78
1933	21·71	20·52	21·28	56·07	59·16	57·20
1934	22·77	26·22	24·22	55·85	53·56	54·88
1935	19·53	23·89	21·38	60·14	55·38	58·12
1936	18·07	24·48	20·97	61·25	51·27	56·78
1937	16·30	22·92	19·27	63·99	51·99	58·60
1938	15·51	21·30	18·14	66·51	54·41	60·98

8.—Average ad valorem Rates of Duty Collected on Dutiable[1] and Total Imports from the United Kingdom, the United States, and All Countries, fiscal years 1868-1938.

Fiscal Year.	U.K.		U.S.		All Countries.		Fiscal Year.	U.K.		U.S.		All Countries.	
	Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.		Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.	Dutiable Imports.	Total Imports.
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.		p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
1868	[2]	[2]	[2]	[2]	20·2	13·1	1904	24·1	17·6	25·2	13·6	27·5	16·8
1869	16·9	13·5	20·1	7·3	20·2	13·1	1905	24·8	18·5	26·1	13·5	27·8	16·7
1870	16·8	13·4	19·5	7·8	20·9	14·1	1906	24·6	18·7	24·8	13·1	27·0	16·4
1871	16·4	13·5	16·3	8·4	19·6	14·0	1907[3]	24·3	18·4	24·2	12·8	26·5	16·1
1872	16·4	12·7	18·0	7·1	19·1	12·4	1908	24·2	18·3	24·6	13·2	26·7	16·5
1873	15·6	10·9	17·7	6·5	18·3	10·4	1909	25·8	19·0	24·9	13·2	27·5	16·7
1874	16·5	12·8	17·4	7·1	18·9	11·7	1910	25·1	18·9	24·8	13·5	26·8	16·5
1875	18·1	14·8	17·3	7·9	19·6	13·1	1911	24·6	18·9	24·7	13·7	25·9	16·2
1876	18·8	15·0	19·2	9·3	21·3	13·9	1912	25·0	19·1	25·0	14·8	26·1	16·8
1877	19·4	16·2	18·7	7·9	20·6	13·3	1913	25·1	19·6	24·9	15·8	26·1	17·1
1878	20·1	17·3	20·4	9·4	21·4	14·2	1914	25·2	19·5	24·8	15·6	26·1	17·3
1879	20·5	18·0	23·2	13·1	23·3	16·4	1915	27·1	20·5	25·1	14·2	27·4	16·8
1880	24·0	20·0	23·1	16·0	26·1	20·2	1916	28·4	19·1	25·0	13·5	27·2	15·5
1881	24·5	20·5	22·0	15·5	25·8	20·4	1917	24·9	17·6	22·7	11·4	23·8	13·0
1882	24·1	19·9	21·5	15·0	25·3	19·5	1918	24·3	17·3	20·5	11·1	21·5	12·1
1883	24·3	19·2	21·1	14·8	25·3	19·0	1919	22·3	15·3	20·9	11·6	21·5	12·3
1884	24·4	19·1	20·7	14·9	25·2	19·0	1920	22·1	16·2	22·5	14·0	22·5	14·7
1885	24·8	19·0	21·2	14·5	26·1	19·2	1921	20·9	16·6	20·3	12·9	20·6	14·1
1886	25·7	20·0	22·8	15·8	27·5	20·2	1922	24·8	20·1	23·0	13·9	24·5	16·2
1887	26·1	20·8	23·8	16·2	28·7	21·3	1923	24·5	20·1	22·5	13·8	24·9	16·7
1888	29·1	22·9	26·2	15·3	31·8	22·0	1924	22·3	18·3	22·3	13·2	22·9	15·1
1889	29·3	22·4	25·4	14·7	31·9	21·8	1925	22·1	18·2	23·1	13·0	23·3	15·1
1890	28·8	22·1	26·6	15·8	31·0	21·4	1926	21·6	18·4	23·9	13·2	24·7	15·5
1891	29·0	21·7	26·0	14·9	31·4	21·0	1927	23·9	19·7	23·1	13·2	24·1	15·4
1892	29·4	22·1	26·5	16·1	29·7	17·8	1928	25·6	20·6	23·3	13·5	24·2	15·5
1893	29·8	22·3	26·7	14·6	30·3	18·4	1929	25·9	20·6	23·4	14·1	24·4	15·8
1894	30·0	22·3	27·0	13·7	30·9	17·8	1930	25·5	20·0	23·3	14·4	24·3	15·9
1895	30·1	22·6	26·7	13·7	30·5	17·8	1931	26·9	19·5	24·8	15·2	26·0	16·4
1896	30·2	22·4	26·7	14·5	30·0	19·2	1932	29·2	21·9	27·4	17·9	29·3	19·7
1897	30·7	21·1	26·7	14·3	30·0	18·7	1933	25·8	16·6	28·1	17·4	30·1	19·0
1898	29·5	20·8	26·1	13·3	29·7	17·5	1934	26·2	14·2	28·6	16·8	29·2	16·9
1899	26·6	19·8	26·3	13·2	28·8	17·2	1935	26·2	13·8	27·4	16·3	28·1	16·2
1900	25·6	18·2	25·0	13·2	27·7	16·7	1936	26·7	12·7	26·3	15·6	26·7	14·7
1901	24·7	18·3	24·8	12·4	27·5	16·4	1937	25·8	12·0	23·8	14·3	24·9	13·7
1902	24·0	17·2	25·2	13·2	27·3	16·5	1938	23·8	11·0	22·9	13·6	23·9	13·0
1903	23·3	16·7	24·9	13·3	27·1	16·5							

---

[1] See p. 489, also Table 18, p. 551.

[2] Not separable by countries.

[3] Nine months.

9.—Imports for Home Consumption of Certain Raw Materials Used in Canadian Manufactures, fiscal years 1911-38.

NOTE.—For the years 1902-10, see Canada Year Book, 1926, p. 463.

Fiscal Year.	Sugar, for Refining.[1]	Vegetable Oil for Soap Industry.	Crude Cotton-seed Oil.	Raw Rubber (including Balata).	Tobacco, Raw.	Hides and Skins.	Cotton, Raw (including Linters).	Hemp, Dressed or Undressed.	Silk, Raw, etc.
	ton.	gal.	cwt.	cwt.	lb.	$	cwt.	cwt.	lb.
1911....	271,533	297,338	[2]	28,035	17,204,271	8,105,330	812,622	81,017	121,748
1912....	281,402	409,861	80,916	44,313	17,203,513	8,903,727	727,939	82,661	112,581
1913....	310,101	439,973	243,872	56,755	22,153,588	13,486,459	774,578	64,990	75,776
1914....	347,168	397,278	265,789	44,504	17,598,449	8,831,010	769,930	55,572	101,669
1915....	335,820	413,819	293,849	65,045	18,595,957	12,842,558	730,325	55,370	94,458
1916....	298,433	618,162	430,013	99,132	20,834,672	12,441,731	969,679	50,914	80,745
1917....	365,772	1,281,233	315,621	107,580	17,702,637	12,873,970	877,634	15,846	138,765
1918....	382,807	2,114,796	408,850	130,956	17,824,947	8,796,966	880,374	45,177	158,648
1919....	359,470	2,393,003	459,685	192,272	25,103,080	5,427,544	1,117,235	72,887	213,441
1920....	540,787	870,289	578,986	244,335	24,345,295	22,654,661	964,715	46,553	298,985
1921....	347,594	1,114,470	417,301	228,062	20,007,411	10,652,787	986,315	47,090	272,508
1922....	432,212	1,351,805	488,683	189,525	20,870,509	5,898,087	953,860	77,833	371,570
1923....	572,120	1,945,464	258,381	253,957	14,548,694	7,947,410	1,252,615	203,844	368,026
1924....	420,076	1,937,543	216,082	288,857	15,941,339	461,581[3]	955,966	340,402	335,495
1925....	419,371	1,733,293	213,201	344,509	13,712,885	502,586[3]	1,008,793	249,032	361,403
1926....	579,272	2.622,651	335,755	469,893	14,943,864	534,089[3]	1,355,738	281,639	529,446
1927....	570,225	3,311,449	297,706	502,312	17,446,774	579,085[3]	1,497,438	123,426	679,923
1928....	466,291	3,611,761	623,148	582,039	18,475,772	678,670[3]	1,462,246	99,503	938,459
1929....	426,872	4,354,829	302,197	777,169	18,726,618	507,773[3]	1,511,270	27,390	1,282,815
1930....	450,950	3,950,590	400,653	733,400	17,113,472	486,442[3]	1,260,699	42,620	1,668,972
1931....	440,790	4,217,484	174,711	595,591	16,580,394	345,439[3]	1,067,222	28,423	1,954,395
1932....	475,591	4,243,234	386,275	552,694	13,075,335	281,316[3]	1,009,023	18,348	2,539,133
1933....	439,217	3,639,995	407,055	410,939	10,199,212	268,355[3]	1,009,073	15,810	2,572,949
1934....	346,599	4,699,056	165,257	511,681	8,129,142	313,482[3]	1,394,536	23,498	2,505,200
1935....	437,555	4,610,785	130,743	636,347	9,414,889	333,013[3]	1,434,408	19,166	2,692,693
1936....	459,402	9,788,338	255,976	569,286	5,772,638	404,708[3]	1,425,413	19,324	3,001,902
1937...	510,506	8,685,469	155,387	625,629	3,006,175	381,128[3]	1,540,314[1]	47,848	2,318,030
1938...	455,92[illegible]	11,000,233	219,857	788,141	2,645,439	356,870[3]	1,598,675	9,590	2,457,274

Fiscal Year.	Wool, Raw.[4]	Noils and Worsted Tops.	Artificial Silk Rovings, Yarns, etc.	Manila, Sisal, Istle, Tampico.	Rags, Waste Paper, and other Waste.	Iron Ore.	Alumina, Bauxite, Cryolite.	Tin in Blocks, Ingots, etc.	Crude Petroleum for Refining.[5]
	cwt.	$	lb.	cwt.	cwt.	ton.	cwt.	cwt.	'000 gal.
1911....	64,224	778,320	[2]	274,493	536,604	[2]	186,152	35,706	54,311
1912....	71,954	689,304	[2]	291,976	564,296	[2]	218,998	41,740	72,231
1913....	92,092	980,432	115,710	346,109	750,003	2,116,933	276,170	51,319	143,338
1914....	72,521	1,072,066	129,982	190,867	716,882	1,972,207	312,259	46,076	177,880
1915....	131,940	1,312,885	128,148	284,620	540,922	1,055,724	261,553	29,402	196,203
1916....	211,407	2,587,949	183,278	384,152	510,472	1,595,995	385,959	32,756	186,753
1917....	145,812	2,988,177	276,873	327,691	780,062	2,318,547	816,509	35,726	135,533
1918....	115,380	4,418,854	160,090	496,904	505,643	2,203,506	1,664,799	38,683	191,376
1919....	158,767	5,314,793	161,206	315,067	570,211	2,227,919	1,916,929	28,044	260,820
1920....	117,717	5,847,787	360,297	456,801	826,593	1,632,011	451,349	44,010	298,541
1921....	92,772	55,331[3]	512,109	457,497	1,142,850	1,950,291	1,198,605	42,727	311,719
1922....	125,867	72,254[3]	570,450	189,071	686,483	656,902	166,695	27,242	391,293
1923....	182,556	91,103[3]	933,791	219,591	870,542	1,044,999	792,210	39,258	397,604
1924....	193,217	86,062[3]	1,239,986	272,462	1,123,282	1,807,223	1,266,799	39,837	418,791
1925....	143,629	58,231[3]	1,684,811	258,804	1,232,567	911,586	1,358,148	43,535	440,672
1926....	134,344	61,421[3]	1,689,730	442,561	1,307,473	1,053,593	1,336,538	44,409	470,617
1927....	164,234	78,875[3]	1,516,448	523,074	1,364,897	1,445,504	1,647,244	50,858	596,467
1928....	138,957	81,331[3]	1,563,020	529,541	1,371,469	1,491,234	2,663,166	48,742	709,960
1929....	140,219	86,470[3]	2,240,704	770,936	1,314,494	2,272,130	3,444,911	58,928	865,336
1930....	103,343	62,939[3]	2,132,362	464,378	1,606,931	2,456,919	2,738,777	56,318	1,110,170
1931....	107,449	66,493[3]	2,569,574	487,035	1,254,557	1,428,970	2,221,550	49,727	994,385
1932....	96,245	73,694[3]	1,501,739	469,827	1,363,974	802,163	1,704,029	38,095	1,016,355
1933....	83,557	80,071[3]	958,047	753,350	792,085	66,514	745,455	28,763	845,588
1934....	172,153	119,317[3]	2,082,202	699,657	880,381	205,811	1,241,609	31,322	1,026,711
1935....	120,123	90,903[3]	965,341	424,579	1,132,684	1,060,843	1,856,059	42,283	1,058,729
1936....	192,191	137,474[3]	1,078,504	623,696	1,151,442	1,431,111	2,578,380	45,757	1,166,803
1937....	237,712	134,793[3]	1,410,756	585,808	1,140,861	1,325,195	3,650,911	51,876	1,243,339
1938....	213,583	107,306[3]	1,829,438	405,907	1,393,529	2,174,559	6,037,285	57,024	1,352,086

[1] Revised since the publication of the 1938 Year Book. [2] None recorded. [3] Cwt.
[4] Includes hair of the camel, alpaca, goat, etc. [5] Prior to 1917 includes all crude petroleum.

10.—Exports to the United Kingdom, to the United States, and to All Countries, of Classes of Merchandise the Produce of Canada, by Values and Percentages, fiscal years 1935-38.

Group.	1935.			1936.			1937.			1938.		
	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.
	VALUES.											
	$	$	$	$	$	$	$	$	$	$	$	$
Vegetable Products (except chemicals, fibres, and wood)	127,657,646	43,148,070	226,233,097	154,261,975	44,663,210	242,861,877	197,083,567	73,603,221	346,450,628	145,273,747	33,180,317	235,324,412
Animals and Their Products (except chemicals and fibres)	54,567,585	19,922,848	86,848,144	54,592,114	34,058,519	100,932,110	73,350,911	46,431,986	133,940,776	77,996,863	42,572,671	136,112,957
Fibres, Textiles, and Textile Products	2,219,483	854,821	7,523,144	2,330,693	2,612,474	10,273,697	2,508,340	3,003,772	12,830,212	3,800,047	2,161,630	14,225,183
Wood, Wood Products, and Paper	25,451,969	108,724,794	160,932,709	28,772,934	125,247,878	181,831,743	36,064,065	153,717,675	223,918,476	45,394,428	168,990,162	253,434,860
Iron and Its Products	10,074,340	2,739,062	40,736,038	11,159,695	5,411,683	52,368,057	13,032,283	6,072,255	53,173,175	16,523,218	6,945,336	69,744,157
Non-Ferrous Metals and Their Products	63,100,604	105,236,847	191,345,386	61,821,441	121,783,549	212,547,372	75,819,787	117,328,297	230,152,314	107,926,841	132,783,014	292,452,554
Non-Metallic Minerals and Their Products (except chemicals)	2,053,754	9,214,868	15,654,323	2,207,869	11,566,497	19,083,643	2,730,516	17,080,392	26,081,028	3,368,888	17,373,163	29,342,764
Chemicals and Allied Products	3,030,908	7,333,756	15,270,064	3,212,081	7,458,104	16,018,391	4,191,193	8,699,580	19,237,697	5,144,611	9,109,196	20,926,267
Miscellaneous Commodities	2,728,948	7,546,288	12,083,020	3,197,996	7,500,512	13,113,527	3,216,036	9,077,366	15,397,600	3,983,039	10,015,602	18,665,455
Totals	**290,885,237**	**304,721,354**	**756,625,925**	**321,556,798**	**360,302,426**	**849,030,417**	**407,996,698**	**435,014,544**	**1,061,181,906**	**409,411,682**	**423,131,091**	**1,070,228,609**
	PERCENTAGES OF EACH CLASS.											
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Vegetable Products (except chemicals, fibres, and wood)	43·9	14·2	29·9	48·0	12·4	28·6	48·3	16·9	32·6	35·5	7·8	22·0
Animals and Their Products (except chemicals and fibres)	18·8	6·5	11·5	17·0	9·5	11·9	18·0	10·7	12·6	19·0	10·1	12·7
Fibres, Textiles, and Textile Products	0·8	0·3	1·0	0·7	0·7	1·2	0·6	0·7	1·2	0·9	0·6	1·3
Wood, Wood Products, and Paper	8·7	35·7	21·2	8·9	34·7	21·4	8·8	35·3	21·1	11·1	39·9	23·7
Iron and Its Products	3·5	0·9	5·4	3·5	1·5	6·2	3·2	1·4	5·0	4·0	1·6	6·5
Non-Ferrous Metals and Their Products	21·7	34·5	25·3	19·2	33·8	25·0	18·6	27·0	21·7	26·4	31·4	27·3
Non-Metallic Minerals and Their Products (except chemicals)	0·7	3·0	2·1	0·7	3·2	2·3	0·7	3·9	2·5	0·8	4·1	2·8
Chemicals and Allied Products	1·0	2·4	2·0	1·0	2·1	1·9	1·0	2·0	1·8	1·3	2·1	2·0
Miscellaneous Commodities	0·9	2·5	1·6	1·0	2·1	1·5	0·8	2·1	1·5	1·0	2·4	1·7
Totals	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

11.—Imports from the United Kingdom, from the United States, and from All Countries, of Classes of Merchandise Entered for Home Consumption, by Values and Percentages, fiscal years 1935-38.

Group.	1935.			1936.			1937.			1938.		
	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.	United Kingdom.	United States.	All Countries.
	VALUES.											
	$	$	$	$	$	$	$	$	$	$	$	$
Agricultural and Vegetable Products (except chemicals, fibres, and wood)...	20,104,264	35,602,475	109,418,595	18,007,399	30,959,760	110,342,532	17,923,553	38,267,822	131,400,217	18,505,686	46,115,565	146,335,406
Animal Products (except chemicals and fibres).....	3,038,530	9,827,680	19,957,477	3,792,424	10,973,245	24,314,220	5,070,766	12,659,575	27,863,224	5,752,255	11,621,353	30.399,795
Fibres, Textiles, and Textile Products................	36,537,696	30,562,261	81,798,280	40,594,719	32,094,435	89,814,164	46,633,288	37,176,542	104,811,304	50,679,714	36,140,269	108,932,093
Wood, Wood Products, and Paper....................	3,251,785	16,045,818	21,199,687	3,513,396	17,863,399	23,271,631	3,761,818	23,060,903	28,927,720	3,952,707	27,830.148	34,221,181
Iron and Its Products.......	18,600,768	77,477,564	100,056,145	20,551,388	88,428,437	114,253,715	23,033,333	121,742,147	150,239,139	31,084,817	170,603,311	209,236,711
Non-Ferrous Metals and Their Products...........	4,581,470	20,858,178	28,496,629	5,829,425	23,305,389	33,685,919	6,062,639	25,400,426	37,037,954	7,271,504	30,954,351	47,063,972
Non-Metallic Minerals and Their Products (except chemicals)...............	13,163,008	77,256,933	102,428,037	12,932,009	78,088,621	105,421,236	13,102,638	86,809,009	116,948,261	13,092,732	105,477,040	136,662,502
Chemicals and Allied Products.....................	6,210,239	17,117,656	28,872,053	6,336,345	17,500,123	29,919,921	6,957,434	19,388,229	33,105,448	7,706,251	22,712,830	36,890,149
Miscellaneous Commodities.	6,194.730	18,891,409	30,204,250	6,317,717	20.266,185	31,695,725	6.962,416	29,216,009	41,542,299	6.963,105	35,824.640	49.328,109
Totals................	**111,682,490**	**303,639,972**	**522,431,153**	**117,874,822**	**319,479,594**	**562,719,063**	**129,507,885**	**393,720,662**	**671,875,566**	**145,008,771**	**487,279,507**	**799,069,918**
	PERCENTAGES OF EACH CLASS.											
	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.	p.c.
Agricultural and Vegetable Products (except chemicals, fibres, and wood)...	18·0	11·7	20·9	15·3	9·7	19·6	13·8	9·7	19·6	12·8	9·5	18·3
Animal Products (except chemicals and fibres).....	2·7	3·2	3·8	3·2	3·4	4·3	3·9	3·2	4·1	4·0	2·4	3·8
Fibres, Textiles, and Textile Products................	32·7	10·1	15·7	34·4	10·0	16·0	36·0	9·4	15·6	35·0	7·4	13·6
Wood, Wood Products, and Paper....................	2·9	5·3	4·1	3·0	5·6	4·1	2·9	5·9	4·3	2·7	5·7	4·3
Iron and Its Products.......	16·7	25·5	19·2	17·4	27·7	20·3	17·8	30·9	22·4	21·4	35·0	26·2
Non-Ferrous Metals and Their Products..........	4·1	6·9	5·4	4·9	7·3	6·0	4·7	6·5	5·5	5·0	6·3	5·9
Non-Metallic Minerals and Their Products (except chemicals)...............	11·8	25·4	19·6	11·0	24·4	18·8	10·1	22·1	17·4	9·0	21·7	17·1
Chemicals and Allied Products.....................	5·6	5·7	5·5	5·4	5·5	5·3	5·4	4·9	4·9	5·3	4·7	4·6
Miscellaneous Commodities.	5·5	6·2	5·8	5·4	6·4	5·6	5·4	7·4	6·2	4·8	7·3	6·2
Totals................	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	1. Agricultural and Vegetable Products.					
	A. MAINLY FOOD.					
	Fruits—					
1	Apples, fresh	bbl.	1,807,398	2,202,053	1,280,402	2,061,115
		$	7,201,174	8,456,959	4,662,634	7,243,374
2	Fruits, canned	lb.	24,082,578	22,726,011	20,333,851	25,331,184
		$	1,392,196	1,271,154	1,244,542	1,721,243
	Totals, Fruits[1]	$	8,909,350	10,452,283	6,279,061	9,346,664
	Vegetables—					
3	Potatoes	bu.	[2]	750	Nil	Nil
		$	–	225	–	–
4	Turnips	bu.	14	[2]	[2]	1,449
		$	15	–	–	453
5	Canned vegetables	lb.	15,634,099	31,317,592	37,416,350	51,118,733
		$	758,814	1,300,448	1,597,538	2,242,943
6	Pickles and sauces	$	1,071,058	1,497,404	1,957,829	1,353,048
	Totals, Vegetables[1]	$	1,829,935	2,803,197	3,563,209	3,596,675
	Grains and Products—					
	Grains—					
7	Barley	bu.	3,344,273	5,179,377	5,213,812	9,666,274
		$	1,815,126	2,305,530	2,966,467	6,535,898
8	Oats	bu.	7,973,704	9,900,380	6,675,305	3,498,684
		$	2,985,457	3,491,878	2,508,878	1,830,864
9	Rye	bu.	111,425	405,235	1,763,042	324,056
		$	64,881	168,238	977,811	322,442
10	Wheat	bu.	113,357,139	133,095,085	155,360,472	69,332,458
		$	90,191,151	111,656,432	153,247,606	89,793,196
	Totals, Grains[1]	$	95,197,180	117,681,648	159,857,300	98,586,607
11	Bran, shorts, and middlings	cwt.	352,475	587,828	321,202	656,860
		$	386,800	548,109	317,144	823,233
12	Cereal foods	$	3,107,135	3,388,607	3,788,426	4,059,487
13	Malt	bu.	933	35,275	41,346	24,647
		$	988	42,276	45,091	37,024
14	Oatmeal and rolled oats	cwt.	488,479	482,358	543,454	554,101
		$	2,009,442	2,218,638	2,648,493	2,743,523
15	Wheat flour	bbl.	2,426,437	2,428,389	2,337,674	2,281,194
		$	8,724,402	9,577,241	10,661,520	13,517,262
	Totals, Grains and Products[1]	$	109,611,265	133,746,818	177,692,344	120,134,511
	Sugar—					
16	Confectionery	$	77,422	106,968	208,220	129,408
17	Maple sugar	lb.	30,925	30,179	28,028	25,750
		$	5,351	4,406	4,198	4,729
	Totals, Sugar[1]	$	87,302	116,512	220,511	141,515
	TOTALS, A. MAINLY FOOD[1]	$	120,819,904	147,337,462	188,106,862	133,749,540
	B. OTHER THAN FOOD.					
	Beverages, Alcoholic—					
18	Whisky	pf. gal.	18,361	14,021	21,178	25,524
		$	83,818	70,558	95,916	117,835
	Totals, Beverages, Alcoholic[1]	$	84,013	72,364	96,706	122,816
	Rubber—					
19	Belting of rubber	$	64,459	110,744	114,195	212,505
20	Canvas shoes, rubber soles	pair	2,127,922	1,718,202	1,642,082	1,216,833
		$	1,111,009	800,607	728,877	556,216
21	Boots and shoes, rubber	pair	1,350,392	1,891,306	3,190,182	3,973,983
		$	1,265,590	1,712,393	2,761,865	3,407,298
22	Heels and soles	$	374,195	347,574	308,193	320,873
23	Motor vehicle tire casings	$	12,550	6,659	173,269	235,023
24	Motor vehicle inner tubes	$	1,247	49	9,429	9,101
	Totals, Rubber[1]	$	3,315,602	3,436,653	4,625,107	5,381,946

---

[1] Totals include other items not specified. [2] None reported. [3] Excluding seed potatoes after Mar. 31, 1936 (see p. 514).

Kingdom, United States, and All Countries, fiscal years 1935-38.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
4,493	2,834	8,323	2,973	2,059,618	2,288,010	1,506,227	2,213,735	1
10,029	7,923	34,826	9,410	8,218,846	8,821,752	5,453,273	7,776,958	
80,863	118,524	269,157	558,860	24,968,437	23,773,441	21,758,571	27,524,570	2
7,281	8,655	20,228	35,299	1,460,454	1,355,944	1,366,376	1,910,084	
380,420	251,105	489,937	657,989	10,496,002	11,258,853	7,778,559	10,932,826	
625,451	568,386	743,554[3]	191,563[3]	1,430,267	1,409,663	1,130,350[3]	865,614[3]	3
337,413	303,476	652,506	124,213	848,185	863,386	969,467	511,491	
1,815,207	2,375,906	2,612,010	2,455,442	1,855,158	2,387,891	2,623,787	2,469,358	4
396,478	634,991	729,969	839,406	405,191	639,259	734,745	845,261	
1,698,494	1,838,469	54,363	46,300	21,101,353	38,162,952	43,175,339	59,031,682	5
69,465	65,351	13,762	2,009	1,013,494	1,608,385	1,902,141	2,691,463	
44,580	408	239	57	1,178,640	1,601,844	2,061,367	1,500,184	6
894,071	1,042,514	1,404,927	972,571	3,591,664	4,860,294	5,809,174	5,661,345	
7,902,482	1,806,344	13,342,569	2,871,353	12,001,178	7,319,384	18,749,862	13,383,599	7
6,003,364	1,221,567	11,826,336	2,429,130	8,210,230	3,674,119	14,901,211	9,550,891	
3,514,848	787,085	226,095	23,721	12,873,595	12,739,083	8,142,122	4,727,833	8
1,334,794	212,645	87,731	13,985	4,915,135	4,520,822	3,176,469	2,572,102	
604,503	1,576	1,683,027	302	737,372	664,242	4,446,739	1,877,620	9
386,567	801	1,152,003	242	463,420	291,643	2,622,959	2,075,586	
13,933,191	21,583,831	22,878,726	917,165	165,701,983	179,124,180	227,996,513	89,628,923	10
11,196,828	16,660,253	21,698,808	1,182,452	132,441,685	148,576,975	223,461,009	116,273,709	
18,983,538	18,156,363	35,064,181	3,994,280	146,467,012	157,383,360	244,772,885	131,141,815	
2,599,358	2,613,665	3,933,025	774,393	3,013,465	3,240,413	4,326,863	1,486,507	11
2,799,416	2,398,136	4,591,824	1,144,619	3,259,579	2,988,324	5,020,834	2,049,468	
42,910	66,747	242,846	75,583	3,274,009	3,554,774	4,160,890	4,346,435	12
2,751,557	2,440,277	1,883,212	1,625,131	2,872,633	2,604,039	2,016,088	1,904,701	13
2,789,940	2,708,160	2,106,289	2,194,339	2,935,114	2,919,996	2,281,235	2,642,114	
4,658	16,505	16,008	1	550,733	573,412	626,650	619,888	14
11,966	32,767	18,743	6	2,330,784	2,670,864	3,083,738	3,155,023	
64,562	179,826	105,253	38,021	4,936,827	4,858,947	4,771,007	3,904,888	15
201,479	574,660	342,784	175,244	18,386,040	19,382,617	21,587,038	23,221,366	
25,647,214	24,287,603	43,588,573	8,234,619	177,929,662	189,850,047	282,820,331	167,930,875	
4,961	7,045	8,232	8,957	251,408	305,104	473,123	490,893	16
3,133,602	3,965,248	5,958,093	4,141,221	3,176,655	4,022,139	6,031,841	4,218,646	17
468,489	641,074	865,292	648,815	475,398	649,739	877,079	660,700	
641,461	1,031,801	1,107,292	786,885	1,324,583	1,481,776	1,683,217	1,396,043	
27,593,578	26,652,672	46,650,006	10,709,974	193,908,632	207,926,168	298,742,686	186,860,405	
2,134,858	2,915,796	5,214,571	4,658,619	2,201,515	2,991,354	5,286,023	4,729,792	18
13,085,161	15,918,595	21,450,569	18,500,716	13,407,076	16,288,585	21,777,246	18,828,293	
13,187,890	15,943,851	21,546,860	18,637,257	13,547,945	16,355,413	21,913,616	19,015,209	
293	20,170	2,642	1,946	495,227	552,921	586,829	837,828	19
48	46	299	409	3,118,539	2,435,352	2,132,666	1,879,064	20
47	53	369	396	1,649,255	1,205,264	994,274	912,328	
17,687	5,775	5,843	2,955	2,043,340	2,560,801	3,940,220	4,916,114	21
35,155	12,256	9,596	5,894	2,031,666	2,480,596	3,589,091	4,452,641	
[2]	103	[2]	40	434,884	400,596	370,399	393,949	22
9,788	298,564	45,893	29,512	6,325,367	6,666,294	7,091,311	8,200,619	23
285	42,392	2,893	1,906	491,130	551,903	621,669	738,777	24
128,966	477,406	210,178	199,039	12,425,465	12,901,311	14,513,793	17,088,677	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	I. Agricultural and Vegetable Products—conc.					
	B. OTHER THAN FOOD—concluded.					
	Seeds—					
1	Clover seed	bu.	9,006	22,933	29,138	14,965
		$	107,035	221,249	259,418	155,839
2	Flaxseed	bu.	11,608	17,434	175,653	15,996
		$	52,940	86,151	314,368	91,906
3	Grass seed	bu.	925	7,792	1,816	746
		$	1,777	9,790	4,940	1,640
4	Potatoes, seed	bu.	[1]	[1]	Nil	Nil
		$	-	-	-	-
	Totals, Seeds[2]	$	179,732	340,423	594,583	270,892
5	Tobacco leaf	lb.	9,903,130	8,182,158	8,562,102	14,936,786
		$	2,710,918	2,531,612	2,653,121	4,930,022
6	Hay and fodder	$	393,926	438,103	822,850	666,330
	TOTALS, B. OTHER THAN FOOD[2]	$	6,837,742	6,924,513	8,976,705	11,524,660
	Totals, Agricultural and Vegetable Products[2]	$	**127,657,646**	**154,261,975**	**197,083,567**	**145,274,200**
	II. Animals and Animal Products.					
	Animals, Living—					
7	Cattle	No.	47,861	2,811	36,453	17,964
		$	3,085,021	190,240	2,767,267	1,590,153
8	Horses	No.	34	222	298	461
		$	5,900	49,525	47,990	67,439
9	Swine	No.	[3]	5	Nil	Nil
		$	-	250	-	-
	Totals, Animals, Living[2]	$	3,117,191	241,456	2,817,208	1,671,500
	Fishery Products—					
	Fish, Fresh—					
10	Lobsters	cwt.	4	1	Nil	Nil
		$	85	23	-	-
11	Salmon	cwt.	44,189	48,453	47,316	57,781
		$	621,105	670,979	667,219	920,939
12	Whitefish	cwt.	[3]	[3]	[3]	9
		$	-	-	-	61
	Totals, Fish, Fresh[2]	$	832,406	917,965	859,819	1,104,137
	Fish, Dried, Salted, Smoked, Pickled—					
13	Codfish, dried	cwt.	90	46	250	22
		$	600	425	1,443	200
	Totals, Fish, Dried, Salted, etc.[2]	$	69,465	61,022	49,612	59,402
	Fish, Preserved—					
14	Lobsters, canned	cwt.	27,521	25,131	19,692	21,683
		$	1,232,367	1,253,638	1,059,267	1,088,812
15	Salmon, canned	cwt.	142,637	192,223	184,325	188,984
		$	3,265,640	4,190,414	3,395,650	3,821,604
16	Sardines	cwt.	43	Nil	Nil	1
		$	483	-	-	7
	Totals, Fish, Preserved[2]	$	4,500,215	5,445,204	4,455,079	4,911,024
	Totals, Fishery Products[2]	$	5,402,086	6,424,191	5,389,876	6,074,628
	Furs—					
	Furs, Undressed—					
17	Beaver	$	370,333	240,177	302,359	504,535
18	Fox	$	6,598,136	6,710,773	6,903,481	5,740,845
19	Marten	$	185,471	175,396	213,467	235,819
20	Mink	$	754,153	506,217	526,841	523,836
21	Muskrat	$	1,020,602	672,447	962,585	834,636
	Totals, Furs, Undressed[2]	$	10,005,253	9,259,525	10,159,382	8,885,527
	Totals, Furs[2]	$	10,362,789	9,774,694	10,767,906	9,328,888

---

[1] Included with other potatoes prior to Apr. 1, 1936 (see footnote 3, p. 512). [2] Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
1,608	952	242,889	213,334	16,753	31,545	295,367	233,431	1
19,559	9,322	1,857,508	1,681,433	191,028	300,051	2,396,019	1,907,557	
41	160	4,156	13	11,766	17,740	180,108	16,141	2
167	170	2,759	51	53,401	86,650	318,493	92,329	
77,645	86,399	97,610	87,401	84,768	103,181	101,514	93,772	3
358,931	224,686	187,557	179,239	369,840	252,713	196,508	192,311	
[1]	[1]	791,270	570,256	[1]	[1]	1,336,167	2,186,098	4
–	–	709,934	393,607	–	–	1,380,620	2,166,274	
398,761	245,982	2,790,121	2,291,493	657,234	681,103	4,344,968	4,422,212	
382	3,720	24,681	493	10,294,600	8,884,737	9,414,023	16,148,159	5
98	410	996	150	2,773,452	2,664,681	2,818,534	5,191,720	
1,285,057	815,345	1,678,187	861,825	1,996,923	1,544,629	3,072,489	1,909,949	6
15,554,492	18,010,538	26,953,215	22,469,890	32,324,465	34,935,709	47,707,942	48,464,007	
43,148,070	**44,663,210**	**73,603,221**	**33,179,864**	**226,233,097**	**242,861,877**	**346,450,628**	**235,324,412**	
31,167	140,526	273,430	264,313	83,430	147,792	315,271	287,459	7
1,757,011	7,019,224	11,010,036	12,090,329	4,979,152	7,360,179	14,000,092	13,914,541	
3,490	10,703	15,289	8,104	3,906	11,257	16,028	9,166	8
405,981	1,216,246	1,899,446	1,040,193	455,004	1,311,191	2,011,696	1,192,576	
158	30,301	76,494	53,432	4,695	34,725	83,456	60,510	9
3,355	531,763	1,365,785	917,445	24,407	556,982	1,398,361	952,712	
2,358,492	9,078,806	14,879,807	15,246,530	5,710,296	9,577,305	18,053,751	17,313,745	
99,387	99,197	97,782	113,610	99,395	99,198	97,783	113,617	10
1,629,333	1,815,551	2,129,553	2,275,210	1,629,481	1,815,612	2,129,563	2,275,760	
58,605	61,940	98,071	64,224	112,889	119,697	164,871	134,714	11
486,888	483,009	699,517	538,945	1,219,661	1,256,453	1,512,205	1,622,516	
112,722	120,357	127,996	129,171	112,722	120,357	127,996	129,180	12
1,074,193	1,284,755	1,573,533	1,597,053	1,074,193	1,284,755	1,573,533	1,597,114	
7,368,480	8,916,554	10,131,354	10,642,290	8,355,079	9,984,674	11,197,210	12,002,625	
83,388	75,358	63,603	55,857	358,169	266,411	207,464	202,503	13
487,353	388,894	363,074	351,002	2,087,489	1,362,980	1,077,114	1,204,309	
1,266,859	1,172,006	1,295,982	1,219,464	4,750,960	4,031,658	3,813,814	3,961,164	
8,523	5,954	6,277	5,509	52,913	45,519	39,396	35,995	14
453,697	318,662	395,499	320,364	2,508,173	2,269,904	2,173,234	1,919,165	
323	39,977	19,563	44,531	392,321	513,301	554,694	543,793	15
5,708	235,113	113,422	299,400	5,989,887	7,344,642	6,969,946	7,351,118	
Nil	1	[4]	242	52,755	53,429	66,540	69,951	16
–	4	3	1,296	418,135	450,284	581,388	621,038	
671,794	747,768	693,692	788,647	9,305,374	10,418,916	10,076,578	10,319,524	
9,321,056	10,860,004	12,281,632	12,930,414	22,425,636	24,459,042	25,275,978	26,571,176	
262,737	413,793	492,935	612,711	640,447	662,645	819,023	1,131,192	17
1,274,950	1,287,022	1,586,680	748,242	8,559,455	8,707,437	9,234,142	6,989,772	18
115,304	207,672	331,834	261,061	303,116	389,639	555,696	503,633	19
1,120,480	1,622,049	1,966,952	1,174,761	1,895,932	2,154,509	2,506,195	1,753,070	20
311,800	663,679	558,894	251,559	1,368,245	1,386,059	1,548,562	1,135,555	21
4,097,853	5,623,071	7,363,645	4,428,199	14,897,986	15,738,166	18,444,030	13,998,235	
4,160,590	5,720,058	7,524,218	4,627,579	15,383,771	16,395,705	19,336,425	14,830,397	

---

[3] None reported.

[4] Less than 0·5 cwt.

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.	United Kingdom.			
		1935.	1936.	1937.	1938.
	II. Animals and Animal Products—concluded.				
1	Hair.......... $	12,512	5,880	8,187	29,546
2	Hides and skins, raw.......... cwt.	24,295	23,608	25,660	20,721
	$	171,815	158,823	200,437	233,882
3	Leather, unmanufactured.......... $	2,825,122	3,426,423	5,343,490	4,051,287
4	Leather, manufactured.......... $	560,424	592,824	787,961	889,166
	Meats—				
5	Bacon and hams.......... cwt.	1,270,529	1,186,509	1,718,258	1,893,433
	$	19,834,321	19,030,333	27,839,974	32,622,079
6	Beef, fresh.......... cwt.	121,357	24,420	87,556	82,968
	$	671,918	157,316	359,287	509,406
7	Pork, fresh.......... cwt.	2,488	5,943	6,972	9,404
	$	29,786	85,282	95,305	150,827
8	Pork, dry salted, pickled.......... cwt.	6,250	2,403	905	1,092
	$	85,721	38,310	13,722	13,509
9	Poultry.......... lb.	2,831,867	1,582,543	3,509,152	2,831,964
	$	530,024	371,708	727,581	589,214
	Totals, Meats[1].......... $	22,747,475	21,162,489	31,330,280	36,159,469
	Milk and Its Products—				
10	Butter.......... cwt.	4	71,358	44,330	36,265
	$	89	1,655,987	1,003,229	1,017,905
11	Cheese.......... cwt.	572,102	528,781	675,845	814,078
	$	6,065,948	6,001,637	9,334,456	11,862,240
12	Milk, processed.......... cwt.	190,019	160,615	111,629	228,609
	$	1,379,386	1,295,458	827,184	1,860,127
	Totals, Milk and Its Products[1].......... $	7,445,782	8,953,082	11,164,869	14,740,272
	Oils, Fats, Greases and Waxes—				
13	Fish and whale oil.......... gal.	400,153	592,108	1,506,141	1,252,373
	$	60,626	131,832	403,277	312,240
14	Lard and compounds.......... cwt.	28,922	181,797	323,559	259,894
	$	261,056	2,338,263	3,841,468	3,067,398
15	Tallow.......... cwt.	430	5	8,154	1,714
	$	1,565	40	38,779	5,573
	Totals, Oils, Fats, Greases and Waxes[1] $	350,397	2,539,908	4,350,339	3,484,924
16	Eggs.......... doz.	1,748,180	912,060	992,850	1,383,830
	$	393,169	235,292	261,186	359,716
17	Honey.......... lb.	2,203,322	1,542,807	2,415,795	2,260,096
	$	206,248	124,350	202,868	205,327
18	Sausage casings.......... $	662,454	667,054	469,611	542,142
19	Tankage.......... cwt.	33,725	Nil	Nil	Nil
	$	45,334	-	-	-
	Totals, Animals and Animal Products[1]. $	**54,567,585**	**54,592,114**	**73,350,911**	**77,996,863**
	III. Fibres and Textiles.				
20	Cotton.......... $	376,741	348,613	551,860	940,079
21	Silk and manufactures of, *n.o.p.*.......... $	76,814	55,729	57,181	42,359
22	Silk socks and stockings.......... doz. pr.	35,000	47,843	49,180	75,912
	$	258,305	327,304	328,897	482,490
	Wool—				
23	Wool, raw.......... lb.	3,671,981	3,176,279	1,230,582	2,061,832
	$	465,746	503,853	260,483	449,913
24	Woollen clothing.......... $	12,101	7,277	6,662	22,448
	Totals, Wool[1].......... $	482,348	513,437	268,094	476,919
25	Silk, artificial.......... $	104,411	130,674	282,320	537,718
26	Binder twine.......... cwt.	65,133	67,737	68,205	62,892
	$	376,787	392,227	479,598	474,340
27	Felt manufactures.......... $	150,745	142,791	145,709	200,549
28	Rags.......... cwt.	7,060	6,773	6,300	14,018
	$	55,677	46,532	43,737	140,814
	Totals, Fibres and Textiles[1].......... $	**2,219,483**	**2,330,693**	**2,508,340**	**3,800,047**

---

[1] Totals include other items not specified. [2] Less than 0·5 cwt.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
215,215	251,894	296,065	379,320	377,679	382,417	504,894	610,192	1
218,877	374,241	364,666	213,214	279,891	417,447	418,282	292,356	2
1,347,582	3,077,792	3,472,474	2,290,902	1,805,242	3,454,341	3,988,888	3,272,569	
243,616	463,906	532,862	470,795	3,514,834	4,312,861	6,335,282	4,885,831	3
41,317	53,649	111,352	56,174	684,726	823,790	1,197,583	1,532,738	4
3,291	6,889	25,092	18,563	1,276,051	1,201,012	1,757,048	1,922,064	5
114,751	213,710	663,823	551,926	19,998,575	19,407,285	28,801,291	33,404,206	
26,726	42,834	15,285	31,129	179,707	92,573	140,008	144,281	6
281,802	511,056	176,949	350,574	1,197,926	916,415	833,605	1,207,021	
5,837	57,177	128,769	129,843	9,908	65,223	139,895	143,169	7
80,366	885,613	1,777,264	2,077,488	132,022	1,002,572	1,936,265	2,290,594	
[2]	2,461	8,537	4,193	24,050	32,562	52,895	51,046	8
10	49,182	158,662	72,070	198,862	325,527	548,995	483,881	
40,923	97,913	168,882	42,947	3,164,790	2,064,402	4,139,279	3,332,720	9
7,564	19,782	42,613	8,685	596,365	488,431	884,562	715,434	
568,146	1,830,811	3,033,299	3,271,705	24,114,755	24,220,802	36,114,497	41,362,775	
50	661	213	108	4,466	76,911	51,406	41,349	10
1,171	16,609	5,634	3,318	104,758	1,795,784	1,183,633	1,163,288	
6,934	31,208	105,719	34,611	602,130	585,449	807,391	879,475	11
100,867	425,724	1,493,372	558,199	6,480,947	6,789,588	11,236,543	12,938,568	
7,233	15,356	6,174	4,842	264,302	243,574	199,668	359,388	12
148,323	178,129	112,417	105,838	2,277,088	2,215,410	1,946,435	3,402,267	
250,401	627,131	1,691,364	846,646	8,863,192	10,807,451	14,447,544	17,687,484	
773,090	647,203	816,906	684,826	1,703,920	1,679,765	2,345,384	2,914,540	13
186,571	196,112	280,545	263,167	325,898	424,034	690,991	821,437	
1,285	5,558	4,798	13	32,942	190,013	331,258	264,915	14
10,984	52,284	36,807	159	298,733	2,426,343	3,913,141	3,133,608	
57,425	100,002	114,581	8,321	58,477	100,080	129,089	17,418	15
301,331	655,919	571,591	37,414	305,257	656,679	641,367	74,394	
527,145	957,084	934,172	334,528	988,752	3,631,980	5,396,160	4,200,457	
60,374	7,173	1,641	1,559	2,006,633	1,140,856	1,225,381	1,658,613	16
9,050	1,539	486	410	455,500	304,789	330,159	440,520	
6,413	6,369	21,783	10,069	2,304,461	1,957,982	2,728,262	2,913,736	17
678	693	1,858	1,077	212,538	151,204	224,507	246,088	
317,882	242,947	444,519	469,697	1,220,679	1,070,660	1,104,913	1,151,599	18
228,131	250,146	304,287	310,131	264,934	250,171	304,339	310,171	19
266,109	346,693	528,730	457,315	316,286	346,748	528,845	457,390	
19,922,848	**34,058,519**	**46,431,986**	**42,572,671**	**86,848,144**	**100,932,110**	**133,940,776**	**136,112,957**	
7,055	5,906	16,025	30,712	1,819,350	1,736,169	2,114,101	3,077,436	20
18,524	112,786	58,689	5,710	184,324	301,326	246,450	191,107	21
24	306	19	98	271,000	331,397	434,085	502,134	22
137	2,039	142	712	1,772,981	2,118,917	2,698,884	3,059,978	
753,299	4,676,866	3,629,466	1,147,727	5,019,358	8,723,846	9,104,460	4,153,511	23
150,161	982,172	996,223	360,530	689,337	1,645,767	2,307,462	1,054,963	
40,960	103,542	211,682	298,041	175,701	306,843	459,299	653,519	24
231,973	1,153,446	1,279,131	757,256	929,941	2,055,046	2,907,567	1,870,665	
2,335	2,821	3,870	12,033	292,897	589,376	1,020,098	1,869,929	25
28,916	107,648	81,771	90,789	120,005	186,826	161,583	160,896	26
180,798	623,394	551,052	634,522	710,580	1,077,961	1,115,234	1,161,126	
4,879	5,473	7,216	5,693	387,182	336,464	374,456	495,692	27
83,149	169,020	176,195	82,841	102,255	194,937	191,552	107,552	28
309,829	613,982	920,063	477,751	419,090	748,154	1,012,139	692,544	
854,821	**2,612,474**	**3,003,772**	**2,161,630**	**7,523,144**	**10,273,697**	**12,830,212**	**14,225,183**	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	IV. Wood, Wood Products, and Paper.					
	Wood, Unmanufactured—					
	Logs and Round Timber—					
1	Logs, Douglas fir	M ft.	178	20	Nil	206
		$	1,520	225	–	3,055
2	Logs, hardwood	M ft.	9,847	6,923	8,265	7,124
		$	301,219	284,503	293,450	289,311
3	Poles, telegraph and telephone	No.	Nil	Nil	Nil	Nil
		$	–	–	–	–
4	Railroad ties	No.	67,806	320,203	171,630	892,362
		$	36,134	171,624	98,093	689,414
	Totals, Logs and Round Timber[1]	$	342,291	461,922	392,107	984,278
5	Laths	M	[2]	5	45	50
		$	–	23	125	100
	Planks and Boards—					
6	Birch	M ft.	63,436	67,921	59,489	74,027
		$	1,761,029	1,846,250	1,634,443	2,276,513
7	Douglas fir	M ft.	333,649	390,946	540,758	484,386
		$	5,295,522	6,268,343	10,013,997	9,671,860
8	Pine	M ft.	26,475	32,247	39,072	46,097
		$	1,025,677	1,296,120	1,576,636	1,812,379
9	Spruce	M ft.	297,714	188,852	258,851	305,754
		$	5,402,171	3,505,808	5,257,757	6,854,327
	Totals, Planks and Boards[1]	M ft.	766,578	712,516	1,011,350	1,012,944
		$	14,521,798	13,926,422	20,768,318	23,106,201
10	Pulpwood	cord	2,904	Nil	Nil	3,329
		$	22,984	–	–	33,315
11	Shingles	squares	6,416	16,171	17,784	28,206
		$	13,032	38,243	47,097	83,708
12	Shooks	$	150,391	162,884	205,384	281,476
13	Spoolwood	M ft.	6,699	7,349	5,480	4,875
		$	292,655	333,716	235,448	210,114
14	Timber, square	M ft.	24,013	26,215	30,837	33,390
		$	451,301	571,980	686,153	761,150
	Totals, Wood, Unmanufactured[1]	$	16,393,243	16,273,650	23,626,490	27,131,812
	Wood, Manufactured—					
15	Doors	$	825,603	2,234,800	2,455,098	2,688,707
16	Match splints	$	377,548	318,191	295,845	299,523
	Wood-pulp—					
17	Chemical	cwt.	646,899	699,710	643,764	1,475,595
		$	1,635,870	1,790,082	1,770,426	4,401,783
18	Mechanical	cwt.	62,206	416,208	168,950	439,702
		$	66,123	426,603	174,484	777,337
	Totals, Wood-pulp[1]	cwt.	709,123	1,116,427	812,714	1,915,827
		$	1,702,028	2,217,830	1,944,910	5,180,546
	Totals, Wood, Manufactured[1]	$	3,470,224	5,296,334	5,232,242	8,809,183
	Paper—					
19	Pulp and fibreboard	cwt.	174,696	193,923	211,170	204,888
		$	521,088	598,102	604,099	606,320
20	Paper board, *n.o.p.*	$	1,920,552	2,375,489	2,048,393	3,155,320
21	Book paper	cwt.	11,746	18,143	15,845	19,456
		$	88,016	132,035	118,530	142,996
22	Newsprint paper	cwt.	1,502,533	2,269,553	2,406,052	2,936,599
		$	2,374,235	3,424,312	3,714,428	4,709,966
23	Wrapping paper	cwt.	5,753	7,660	14,755	21,190
		$	31,441	36,491	59,232	85,654
	Totals, Paper[1]	$	5,402,143	6,997,774	7,027,436	9,270,519
24	Books and printed matter	$	186,359	205,176	177,897	182,914
	Totals, Wood, Wood Products, and Paper[1]	$	**25,451,969**	**28,772,934**	**36,064,065**	**45,394,428**

---

[1] Totals include other items not specified.

[2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
3,120	43,838	3,936	24,261	197,875	205,815	156,747	126,714	1
39,810	467,639	40,193	286,441	1,791,575	2,037,924	2,291,820	2,658,256	
3,152	4,253	3,942	4,446	16,346	16,810	20,952	16,940	2
49,870	63,480	63,851	72,162	379,149	424,289	587,222	592,360	
193,853	200,400	294,209	400,359	194,329	201,013	295,061	401,514	3
528,730	563,508	808,370	1,242,667	529,835	565,018	812,456	1,247,540	
298,295	197,421	286,485	292,244	504,507	966,358	798,329	1,385,731	4
241,679	135,170	220,527	225,717	420,696	513,820	566,137	1,045,506	
1,284,508	1,916,444	2,053,089	3,196,599	3,957,124	4,455,839	5,646,508	7,112,337	
150,333	278,075	286,626	214,162	160,564	284,470	290,730	215,942	5
392,882	727,597	1,043,498	864,590	415,058	743,847	1,057,697	871,712	
8,857	17,507	36,625	31,199	72,785	85,913	96,557	105,645	6
294,198	568,057	1,284,925	1,238,176	2,069,860	2,429,436	2,933,797	3,527,889	
3,075	91,589	88,002	130,750	530,158	646,878	813,094	772,022	7
70,031	1,414,427	1,539,209	2,487,517	8,059,056	10,179,725	14,926,588	15,777,205	
86,721	80,575	86,568	60,685	121,267	119,207	133,350	115,142	8
2,121,972	2,108,997	2,462,992	1,936,244	3,387,914	3,585,504	4,275,559	4,048,632	
124,669	166,497	275,793	212,638	450,092	368,540	549,080	535,836	9
3,004,298	3,953,726	6,627,444	5,706,003	9,024,183	7,896,565	12,341,036	13,119,705	
235,434	404,293	554,245	504,936	1,301,301	1,382,714	1,866,811	1,805,726	
5,912,329	9,448,877	14,165,558	14,178,502	24,900,902	27,605,281	40,284,864	43,662,909	
994,158	968,160	1,166,466	1,522,722	1,003,102	973,738	1,183,361	1,590,363	10
7,054,650	6,901,315	8,544,006	11,817,955	7,131,238	6,943,102	8,679,198	12,468,821	
1,388,285	2,828,836	2,530,088	2,227,331	1,427,227	2,867,885	2,586,892	2,297,061	11
3,427,462	7,609,429	6,432,913	6,247,531	3,505,425	7,692,957	6,578,972	6,430,760	
26,469	1,048	117	3,082	691,442	675,507	735,009	1,373,070	12
1,424	3,138	5,132	5,283	8,123	10,897	10,612	10,865	13
47,394	115,242	190,464	201,491	340,049	466,237	425,912	441,319	
905	2,968	3,936	1,496	119,163	89,346	104,575	115,954	14
23,067	52,447	65,618	39,298	1,707,425	1,477,822	1,797,211	2,333,873	
19,164,041	27,940,579	33,808,956	38,150,033	44,282,275	52,046,263	67,930,452	78,207,925	
728	344	892	331	883,607	2,239,547	2,462,391	2,707,746	15
Nil	Nil	Nil	Nil	377,548	318,191	295,845	299,523	16
6,971,856	8,280,235	10,197,666	9,058,047	9,403,860	10,339,190	12,147,032	12,250,777	17
17,206,402	20,053,432	24,838,959	25,786,527	22,567,432	24,547,748	29,222,085	35,434,552	
2,350,012	2,317,147	2,716,717	2,469,379	2,412,218	2,733,355	2,885,667	2,909,318	18
2,688,689	2,442,829	2,955,709	2,910,421	2,754,812	2,869,432	3,130,193	3,688,170	
9,746,030	11,210,106	13,626,850	12,076,146	12,249,540	13,722,878	15,792,020	15,739,081	
20,423,536	23,140,252	28,602,029	29,471,434	25,869,296	28,103,970	33,210,237	39,960,178	
20,621,899	23,246,887	28,786,375	29,620,038	28,411,698	31,872,820	37,217,274	44,399,645	
540	3,590	18,838	8,508	279,596	307,223	385,261	360,571	19
1,645	12,446	58,022	26,468	858,215	981,152	1,177,521	1,161,896	
361,007	445,609	640,942	558,300	2,514,140	3,039,637	2,894,383	4,262,780	20
331	336	277	2,455	50,702	61,296	65,833	118,505	21
3,616	3,563	3,167	8,527	351,254	435,014	444,507	777,729	
39,068,685	42,362,075	50,597,101	53,160,710	47,850,462	53,261,626	62,899,709	63,815,792	22
68,106,166	72,956,142	89,166,874	99,588,555	82,147,844	90,761,379	110,176,448	120,007,550	
19,465	18,386	17,446	13,866	245,953	251,291	384,777	419,531	23
27,685	27,881	29,178	26,548	690,446	751,887	1,295,775	1,699,929	
68,649,416	73,683,795	90,641,369	100,758,842	87,569,412	97,094,240	117,818,478	129,890,493	
289,438	376,617	480,975	461,249	669,324	818,420	952,272	936,797	24
108,724,794	**125,247,878**	**153,717,675**	**168,990,162**	**160,932,709**	**181,831,743**	**223,918,476**	**253,434,860**	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	V. Iron and Its Products.					
1	Pigs, ingots and billets	ton	27,231	62,988	91,187	148,072
		$	636,396	1,353,852	2,222,118	4,184,908
2	Scrap iron or steel	ton	2,195	139	2,857	26,749
		$	21,289	2,318	25,988	339,453
3	Rolling-mill products	ton	41,539	46,053	41,293	35,556
		$	1,253,789	1,376,305	1,298,031	1,611,573
4	Tubes and pipes	$	25,426	34,490	40,205	47,867
5	Wire	$	315,841	385,710	470,850	331,513
6	Farm implements	$	593,915	774,526	1,086,548	1,412,429
7	Hardware and cutlery	$	1,112,607	1,266,901	1,291,790	1,327,666
	Machinery—					
8	Adding machines	$	114,627	205,313	678,813	754,652
9	Electric vacuum cleaners	$	230,885	540,029	103,253	50,713
10	Sewing machines	$	4,947	1,766	433	655
11	Washing machines and wringers	$	349,470	388,163	452,637	750,930
12	Typewriters and parts	$	12,965	13,962	502,430	943,673
	Totals, Machinery[1]	$	2,061,513	2,560,694	3,713,677	4,492,832
13	Tools	$	267,835	315,855	394,115	477,931
	Vehicles—					
14	Automobiles, freight	No.	4	7	3	4
		$	2,009	2,973	1,506	1,923
15	Automobiles, passenger	No.	5,277	3,943	2,546	2,321
		$	3,530,912	2,725,993	2,145,036	1,889,937
16	Automobiles, parts of	$	19,646	19,018	8,839	17,200
	Totals, Vehicles[1]	$	3,553,535	2,751,303	2,155,847	1,911,323
	Totals, Iron and Its Products[1]	$	**10,074,340**	**11,159,695**	**13,032,283**	**16,523,218**
	VI. Non-Ferrous Metals.					
17	Aluminium in bars, blocks, etc.	cwt.	270,232	330,608	417,592	576,103
		$	4,629,061	5,745,538	8,081,088	11,050,523
18	Brass	$	464,225	363,439	459,562	570,396
	Copper—					
19	Copper ore	cwt.	28,697	10,884	8,098	12,344
		$	137,048	58,277	63,141	116,367
20	Copper blister	cwt.	[2]	[2]	[2]	[2]
		$	-	-	-	-
21	Copper in ingots, bars, rods, strips, etc.	cwt.	1,963,329	2,034,342	2,568,253	2,687,641
		$	14,398,141	16,102,177	25,235,656	34,773,116
	Totals, Copper[1]	$	14,741,154	16,381,403	25,587,108	35,242,762
22	Lead in ore	cwt.	[2]	29	Nil	Nil
		$	-	104	-	-
23	Lead in pigs, etc.	cwt.	1,832,589	1,877,370	2,069,348	2,255,929
		$	3,185,588	5,234,242	8,024,985	9,145,964
	Nickel—					
24	Nickel in ore, matte, etc.	cwt.	379,953	400,898	301,646	467,767
		$	6,838,730	7,218,434	5,429,863	8,420,212
25	Nickel, fine	cwt.	61,212	204,364	179,533	528,901
		$	2,748,981	9,064,223	7,717,814	21,117,003
26	Nickel, oxide	cwt.	3,193	2,644	2,858	2,004
		$	110,144	84,605	96,801	68,299
	Totals, Nickel	$	9,697,855	16,367,262	13,244,478	29,605,514
	Precious Metals—					
27	Gold-bearing quartz, dust, etc.	oz.	[2]	21	261	644
		$	-	696	8,394	21,586
28	Gold bullion, other than monetary	oz.	486,449	73,924	52,921	71,592
		$	16,702,500	2,599,500	1,876,500	2,511,436
29	Platinum in concentrates	$	5,402,955	5,174,200	8,052,314	7,116,351
30	Silver in ore	oz.	[2]	61,558	3,359	35,543
		$	-	32,504	1,525	13,882
31	Silver bullion	oz.	2,464,911	1,552,802	2,428,324	1,883,089
		$	1,138,918	1,035,669	1,099,263	843,392
	Totals, Precious Metals[1]	$	23,498,743	9,239,206	11,348,320	10,976,585

---

[1] Totals include other items not specified.
[2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
44,072	55,838	71,793	36,911	71,869	119,881	164,848	200,542	1
1,084,899	1,325,181	1,744,250	1,304,403	1,767,267	2,739,748	4,074,851	6,208,317	
46,917	88,389	132,567	73,513	89,652	128,371	206,865	142,945	2
371,600	815,811	1,450,263	935,834	742,285	1,163,261	2,189,890	1,929,075	
1,633	1,962	1,635	2,370	64,754	78,704	91,526	61,921	3
42,683	56,784	41,077	58,367	1,967,381	2,463,441	3,093,006	2,925,865	
83,146	92,759	44,183	104,368	886,287	917,938	884,497	936,253	4
670	856	982	1,449	850,834	1,065,028	1,166,356	957,340	5
603,040	2,467,203	1,926,351	3,743,473	3,567,253	6,344,437	6,276,608	10,705,957	6
55,371	161,763	142,724	76,459	1,823,704	2,108,350	2,201,921	2,207,824	7
1,777	675	175	615	134,573	322,019	781,865	928,797	8
3,487	2,230	3,028	15,494	295,277	669,701	172,297	160,724	9
1,646	3,217	5,738	3,493	1,907,814	1,552,803	1,548,582	2,607,745	10
645	588	318	683	393,271	541,996	706,577	1,481,432	11
3,253	1,207	2,147	1,178	389,115	181,323	985,469	1,506,672	12
213,204	130,472	150,702	240,178	5,368,997	5,803,925	7,607,472	11,305,195	
8,947	15,592	27,945	17,872	811,122	994,314	1,203,200	1,561,001	13
11	13	19	29	12,737	17,420	15,155	22,774	14
6,064	3,948	6,498	4,718	4,675,901	6,158,129	5,616,387	8,409,621	
357	388	437	443	36,083	49,911	38,424	46,076	15
75,437	118,300	148,226	139,881	14,516,269	17,727,901	13,809,343	16,889,742	
51,050	38,094	59,324	33,135	2,642,335	3,224,008	2,902,938	2,992,353	16
151,097	191,265	241,655	214,347	21,904,732	27,208,481	22,460,693	28,525,967	
2,739,062	**5,411,683**	**6,072,255**	**6,945,336**	**40,736,038**	**52,368,057**	**53,173,175**	**69,744,157**	
36,217	41,989	85,039	193,254	457,653	558,859	680,357	1,096,131	17
579,434	622,700	1,365,224	2,874,731	7,788,189	9,358,074	12,522,047	20,748,973	
57,470	194,978	318,861	449,486	920,565	984,323	1,141,648	1,512,410	18
223,125	255,178	368,831	550,052	331,611	378,973	521,729	892,248	19
973,889	1,364,610	2,800,339	5,077,277	1,454,256	2,024,180	3,963,652	8,050,159	
454,657	544,845	Nil	197,606	454,657	544,845	Nil	197,606	20
3,499,641	4,174,227	–	2,267,800	3,499,641	4,174,227	–	2,267,800	
29	36	222	375	2,558,417	2,986,166	3,583,982	3,560,568	21
405	587	2,239	4,284	18,750,596	23,697,792	34,873,145	45,674,426	
4,508,924	5,633,968	3,089,411	7,587,725	24,539,749	31,031,411	40,221,226	57,269,726	
19,183	1,146	28,086	103,534	219,939	79,502	103,132	147,454	22
76,726	4,581	123,913	594,436	459,703	231,624	340,609	788,957	
[2]	21	10	10	2,897,087	2,860,854	3,439,935	3,200,544	23
–	111	63	71	5,089,045	8,055,158	13,438,592	13,326,989	
85,831	96,484	111,378	137,070	598,277	661,947	601,905	847,315	24
1,543,184	1,737,027	2,004,725	2,466,489	10,766,952	11,907,860	10,835,789	15,251,107	
433,501	615,251	842,984	656,259	562,637	908,645	1,131,141	1,380,447	25
10,688,412	15,433,539	21,067,972	16,407,716	16,375,391	28,439,250	33,413,742	45,323,544	
7,367	10,251	28,410	9,184	34,111	38,660	57,315	43,117	26
150,102	203,377	578,930	182,904	1,280,516	1,297,270	1,632,653	1,343,949	
12,381,698	17,373,943	23,651,627	19,057,109	28,422,859	41,644,380	45,882,184	61,918,600	
117,645	138,689	185,955	214,657	117,877	139,686	190,914	221,650	27
3,718,241	4,767,713	6,326,990	7,229,580	3,725,211	4,802,029	6,497,281	7,461,614	
2,304,303	2,309,548	2,135,278	2,400,524	2,790,752	2,383,472	2,188,199	2,472,116	28
80,023,431	80,815,354	74,790,769	83,692,300	96,725,931	83,414,854	76,667,269	86,203,736	
[2]	600	Nil	Nil	5,522,018	5,286,260	8,185,250	7,415,344	29
1,280,929	1,226,111	2,833,246	5,519,241	1,453,079	1,732,537	3,387,273	5,999,591	30
548,738	771,664	1,263,770	2,475,581	628,071	1,053,213	1,496,431	2,671,195	
5,081,710	16,871,081	10,145,504	13,751,218	9,553,163	18,458,481	12,800,319	16,214,486	31
2,636,063	10,361,830	4,538,264	6,136,389	4,729,586	11,420,747	5,747,319	7,242,280	
87,232,749	97,136,587	87,547,822	100,460,845	111,891,463	106,793,429	99,531,903	112,391,102	

12.—Principal Exports of Canadian Produce from Canada to United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	VI. Non-Ferrous Metals—concluded.					
	Zinc—					
1	Zinc ore	cwt.	68,578	10,580	Nil	Nil
		$	117,250	17,500	–	–
2	Zinc spelter	cwt.	1,944,907	2,185,952	2,061,828	2,001,340
		$	5,264,044	6,690,035	6,756,236	8,804,247
	Totals, Zinc[1]	$	5,394,622	6,724,160	6,766,597	8,825,856
3	Electrical apparatus	$	562,796	620,339	951,395	1,019,595
	Totals, Non-Ferrous Metals[1]	$	**63,100,604**	**61,821,441**	**75,819,787**	**107,926,841**
	VII. Non-Metallic Minerals.					
	Asbestos—					
4	Asbestos, raw	ton	4,437	4,792	6,971	14,096
		$	310,313	292,560	449,251	886,066
5	Asbestos sand and waste	ton	2,135	3,630	4,576	6,357
		$	45,985	74,921	86,531	119,011
	Totals, Asbestos[1]	$	449,871	476,045	634,612	1,124,239
6	Clay and products	$	13,916	4,976	22,861	63,594
	Coal and Its Products—					
7	Coal	ton	24,427	37,948	26,209	Nil
		$	132,760	224,786	133,576	–
8	Coke	ton	Nil	779	1,090	1,990
		$	–	29,080	34,200	62,318
9	Tar, pitch, and oils	$	10	Nil	Nil	Nil
	Totals, Coal and Its Products[1]	$	132,770	253,866	167,776	62,318
10	Petroleum and products	$	21,657	53,711	68,094	21,991
11	Abrasives, artificial, crude	cwt.	89,736	94,023	167,594	255,273
		$	709,172	752,513	1,038,343	1,448,649
12	Gypsum, crude	ton	31,895	65,024	104,925	105,842
		$	33,477	66,764	110,282	110,443
	Totals, Non-Metallic Minerals[1]	$	**2,053,754**	**2,207,869**	**2,730,516**	**3,368,888**
	VIII. Chemicals and Allied Products.					
13	Acids	$	868,208	710,500	1,088,035	986,531
14	Cobalt oxide and salts	$	283,112	469,169	561,555	486,379
15	Drugs, medicinal	$	444,765	554,819	662,758	719,321
	Fertilizers—					
16	Ammonium sulphate	cwt.	Nil	Nil	Nil	Nil
		$	–	–	–	–
17	Cyanamid	cwt.	Nil	Nil	56	Nil
		$	–	–	90	–
	Totals, Fertilizers[1]	$	Nil	Nil	90	Nil
18	Paints and varnishes	$	293,593	323,262	454,538	440,904
19	Soap	$	533,648	595,074	814,967	1,009,451
20	Sodium compounds	$	51,436	63,596	93,068	35,154
	Totals, Chemicals and Allied Products[1]	$	**3,030,908**	**3,212,081**	**4,191,193**	**5,144,611**
	IX. Miscellaneous Commodities.					
21	Containers (outside coverings)	$	10,454	12,037	15,054	33,132
22	Electric energy	M k.w.h.	Nil	Nil	Nil	Nil
		$	–	–	–	–
23	Films	$	1,382,831	1,868,619	1,514,207	1,758,832
24	Settlers' effects	$	487,470	454,419	510,764	499,646
25	Ships	$	[2]	[2]	2,000	[2]
26	Stationery, *n.o.p.*	$	475,478	517,879	632,256	627,479
	Totals, Miscellaneous Commodities[1]	$	**2,728,948**	**3,197,996**	**3,216,036**	**3,983,039**
	Totals, Exports, Canadian Produce[1]	$	**290,885,237**	**321,556,798**	**407,996,698**	**409,412,135**

[1] Totals include other items not specified. [2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—concluded.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
61	8	3	1,702	353,632	160,468	436,781	689,359	1
276	30	13	3,860	602,928	288,665	945,303	2,689,190	
4,370	11,766	75,029	123,166	2,516,290	2,633,771	2,659,489	3,005,341	2
10,063	36,205	303,636	689,512	6,900,018	8,056,628	8,842,991	13,252,658	
10,339	39,353	304,675	710,874	7,545,793	8,418,199	9,863.937	16,059,164	
28,105	45,067	28,120	36,116	2,306,266	2,941,248	3,611,393	4,429,148	3
105,236,847	**121,783,549**	**117,328,297**	**132,783,014**	**191,345,386**	**212,547,372**	**230,152,314**	**292,452,554**	
43,991	64,354	83,664	91,248	81,494	109,270	140,804	192,967	4
2,040,464	3,321,538	4,346,725	4,978,829	4,021,968	5,865,136	7,602,623	10,930,264	
69,981	100,785	168,919	150,268	76,649	108,828	180,183	168,011	5
998,168	1,589,583	2,754,216	2,460,583	1,131,540	1,746,708	2,966,679	2,791,130	
3,040,400	4,911,947	7,101,580	7,441,272	5,299,825	7,778,782	10,793,696	14,009,619	
50,793	72,531	113,004	79,636	200,629	443,578	462,421	620,142	6
119,834	173,009	210,417	222,665	334,721	434,982	418,065	345,304	7
445,105	646,864	783,413	838,007	1,527,011	1,970,367	1,780,856	1,434,237	
40,113	29,815	28,615	50,632	41,903	33,325	33,670	55,310	8
548,901	271,144	237,331	379,393	571,058	350,267	343,695	493,297	
501,656	729,848	636,118	900,140	726,094	805,622	703,000	978,360	9
1,495,887	1,648,197	1,656,862	2,117,540	2,824,388	3,126,597	2,827,551	2,905,894	
316,676	252,804	620,629	518,226	1,001,223	986,735	1,585,929	1,165,661	10
1,186,028	1,340,606	1,651,369	1,847,263	1,306,215	1,455,723	1,857,674	2,126,157	11
2,970,756	3,295,236	4,410,575	4,856,668	3,781,372	4,121,292	5,569,676	6,391,033	
315,338	365,267	603,302	731,828	351,277	430,291	708,227	840,134	12
371,745	429,982	710,280	850,003	410,996	496,746	820,562	963,196	
9,214,868	**11,566,497**	**17,080,392**	**17,373,163**	**15,654,323**	**19,083,643**	**26,081,028**	**29,342,764**	
2,143,965	1,806,814	1,898,306	1,118,059	3,063,484	2,585,329	3,078,334	2,235,444	13
Nil	Nil	14	134,883	366,125	480,633	572,545	644,863	14
22,607	28,185	28,203	64,398	774,843	1,014,485	1,310,276	1,489,927	15
351,283	285,974	382,283	419,197	996,903	1,005,546	1,466,723	1,293,683	16
395,775	325,176	383,499	476,649	1,056,771	1,099,605	1,526,131	1,397,495	
2,016,986	2,209,296	2,722,530	2,783,035	2,165,982	2,275,723	2,833,169	2,960,650	17
2,152,583	2,290,663	2,934,849	3,101,519	2,340,884	2,384,610	3,089,325	3,353,515	
3,227,673	3,218,373	4,459,772	5,291,303	4,179,314	4,282,833	6,088,875	6,872,394	
29,361	58,375	52,402	38,136	633,734	723,313	911,049	1,042,670	18
419,596	391,462	703	443	1,115,906	1,152,439	999,349	1,261,210	19
1,150,628	1,484,119	1,642,885	2,013,282	3,375,974	4,019,629	4,221,697	4,479,006	20
7,333,756	**7,458,104**	**8,699,580**	**9,109,196**	**15,270,064**	**16,018,391**	**19,237,697**	**20,926,267**	
233,123	296,179	938,907	1,268,339	440,405	1,126,677	1,663,657	2,204,412	21
1,269,625	1,329,414	1,624,878	1,851,492	1,269,667	1,329,457	1,624,934	1,851,531	22
3,016,221	3,157,905	3,760,966	4,078,032	3,019,154	3,160,817	3,764,831	4,080,785	
1,110,903	1,414,532	1,417,840	1,410,970	3,026,341	3,768,115	3,432,860	3,728,078	23
2,459,746	2,173,530	2,340,145	2,513,473	3,238,124	2,911,546	3,137,466	3,311,990	24
110,245	8,235	8,950	111,245	269,845	78,235	164,950	530,590	25
14,551	30,326	20,496	25,422	619,263	716,550	883,782	976,863	26
7,546,288	**7,500,512**	**9,077,366**	**10,015,602**	**12,083,020**	**13,113,527**	**15,397,600**	**18,665,455**	
304,721,354	**360,302,426**	**435,014,544**	**423,130,638**	**756,625,925**	**849,030,417**	**1,061,181,906**	**1,070,228,609**	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	I. Agricultural and Vegetable Products.					
	A. Mainly Food.					
	Fresh Fruits—					
1	Bananas	stem	Nil	Nil	Nil	Nil
		$	–	–	–	–
2	Grapefruit	lb.	25,800	Nil	5,167	25,248
		$	863	–	191	748
3	Grapes	lb.	55,630	103,790	43,334	46,740
		$	3,239	13,057	4,705	3,042
4	Lemons	box	3,123	787	2,110	780
		$	10,860	3,435	8,397	3,174
5	Oranges	cu. ft.	2,813	12,858	65,404	144,777
		$	6,121	19,033	70,094	183,938
6	Pears	lb.	Nil	12,200	4,500	11,850
		$	–	961	125	584
7	Strawberries	lb.	Nil	Nil	Nil	Nil
		$	–	–	–	–
	Totals, Fresh Fruits[1]	$	21,337	37,103	83,866	195,840
	Dried Fruits—					
8	Currants	lb.	1,498	50,842	597	973
		$	275	4,526	66	147
9	Dates	lb.	4,069,247	2,387,383	1,249,097	728,602
		$	119,772	67,550	31,898	18,830
10	Prunes and dried plums	lb.	3,145	4,480	Nil	17
		$	234	159	–	9
11	Raisins	lb.	990,563	579,291	364,043	511,012
		$	57,880	35,838	22,611	28,407
	Totals, Dried Fruits[1]	$	287,398	143,923	110,588	50,720
	Preserved Fruits—					
12	Peaches, canned	lb.	29,368	Nil	150	133
		$	2,476	–	10	12
13	Pineapples, canned	lb.	Nil	35,100	3,791	5,836
		$	–	892	360	540
	Totals, Preserved Fruits[1]	$	58,719	57,268	88,734	79,384
14	Fruit juices	$	16,726	9,150	17,186	18,350
	Nuts—					
15	Coco-nuts	$	[2]	[2]	[2]	[2]
16	Nuts, not shelled	lb.	1,320,880	1,217,319	778,549	416,515
		$	70,228	75,690	60,828	46,928
17	Nuts, shelled	lb.	82,830	50,949	149,071	211,845
		$	17,622	12,167	27,655	63,584
	Totals, Nuts[1]	$	87,850	88,560	88,681	110,681
	Vegetables—					
18	Onions	$	3,249	12,745	3,954	5,362
19	Potatoes, sweet	$	[2]	[2]	[2]	[2]
20	Potatoes, *n.o.p.*	cwt.	[2]	[2]	[2]	[2]
		$	–	–	–	–
21	Tomatoes, fresh	lb.	Nil	60	224	216
		$	–	7	20	34
22	Other fresh vegetables	$	140	674	1,165	774
23	Vegetables, canned	lb.	3,958	207	2,369	3,493
		$	417	117	316	238
24	Pickles and sauces	$	148,233	184,668	221,445	207,626
	Totals, Vegetables[1]	$	154,192	210,898	244,213	233,582
	Grains and Products—					
25	Biscuits	lb.	1,439,393	2,361,673	2,102,235	2,072,682
		$	156,544	321,962	318,887	314,394
26	Corn	bu.	36	38	217,749	25,237
		$	50	73	167,160	22,078
27	Rice	cwt.	8,337	3,042	1,305	2,283
		$	20,701	8,791	3,757	5,549
	Totals, Grains and Products[1]	$	728,857	651,516	680,959	455,232

---

[1] Totals include other items not specified. [2] None reported. [3] Revised since the publication of the 1938 Year Book.

Kingdom, United States, and All Countries, fiscal years 1935-38.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
235,235	324,317	325,754	435,963	3,223,648	2,967,234	3,392,309	3,623,135	1
379,508	527,845	553,362	717,475	1,687,818	1,767,092	2,002,966	2,242,459	
28,984,183	31,775,950	42,160,118	46,462,317	33,623,930	39,688,217	46,808,118	52,990,709	2
777,454	853,956	1,105,564	1,282,871	892,283	1,029,688	1,211,327	1,435,374	
18,401,757	19,088,754	25,699,639	30,353,567	18,724,357	19,420,406	26,137,351	30,791,593	3
738,646	629,828	937,825	975,754	756,828	653,770	963,392	1,000,012	
200,348	338,029	288,842	198,074	380,892	371,022	371,520	367,434	4
679,008	1,234,028	1,360,477	986,839	1,122,687	1,335,037	1,620,873	1,541,153	
3,744,151	4,260,658	4,501,344	4,496,873	4,561,162	4,904,674	5,197,043	5,438,847	5
4,946,136	5,239,209	6,388,233	6,417,897	6,028,259	5,772,238	6,980,752	7,235,709	
13,432,332	18,012,247	22,812,894	17,245,111	13,656,615	18,092,713	23,166,619	17,501,329	6
412,213	407,888	553,251	477,628	421,539	411,078	567,050	489,477	
5,986,144	4,988,431	4,640,085	5,641,611	5,986,144	4,988,431	4,640,175	5,641,641	7
416,180	391,012	424,025	430,717	416,180	391,012	424,053	430,720	
9,414,881	10,620,591	13,182,435	13,178,486	12,586,403	12,897,652	15,881,865	16,546,947	
1,500	250	300	Nil	5,044,972	5,625,746	4,669,960	6,157,747	8
180	32	39	-	471,679	521,438	443,648	566,317	
210,394	359,448	544,666	980,301	15,819,210	17,189,420	16,853,313	14,557,448	9
15,196	24,718	30,292	50,427	449,406	458,719	455,653	378,314	
17,354,938	19,310,460	17,747,349	19,051,158	17,448,433	19,318,665	17,747,691	19,051,205	10
935,195	786,951	809,359	793,426	942,745	787,459	809,389	793,441	
9,161,365	7,766,269	7,910,677	5,849,790	37,262,634	35,810,480	40,260,540	37,345,025	11
458,919	381,818	438,920	339,083	2,982,586	3,057,640	3,845,146	3,367,280	
1,689,090	1,553,809	1,692,373	1,635,781	5,517,990	5,496,178	6,257,465	5,716,757	
171,312	272,155	171,828	246,908	2,475,427	3,704,195	4,569,722	4,742,591	12
11,373	16,516	11,404	15,850	157,036	248,159	305,171	298,142	
155,164	195,897	634,210	300,089	20,073.368	19,239,113	26,271,885	19,686,871	13
14,433	17,335	50,584	24,877	638,306	642,196	906,779	670,641	
158,695	201,483	324,844	226,829	1,491,067	1,638,972	2,161,156	1,873,350	
87,875	189,830	339,770	548,716	156,538	266,083	495,779	750,013	14
394	345	714	653	151,479	196,666	213,815	242,733	15
1,444,300	1,624,887	2,518,902	2,862,708	44,286,729	39,193,302	41,278,469	41,308,142	16
122,137	189,967	363,141	399,638	1,127,291	1,407,446	1,622,016	1,733,674	
829,821	1,148,313	1,220,893	1,189,217	8,569,738	9,881,176	9,928,138	8,899,620	17
243,399	342,099	391,514	419,281	1,497,325	1,831,029	1,864,530	1,685,289	
365,930	532,467	755,730	819,584	2,812,416	3,470,937	3,748,241	3,696,170	
60,788	89,136	120,766	300,919	181,779	272,008	253,265	442,709	18
108,365	110,136	145,198	134,784	110,486	112,750	145,998	136,887	19
113,920	104,703	119,570	146,753	123,363	115,389	122,354	150,675	20
152,697	143,075	289,180	201,702	170,452	161,071	296,850	209,852	
11,290,788	6,148,044	16,305,971	17,994,085	30,612,570	32,242,753	40,503,715	42,003,267	21
345,266	317,018	581,311	717,166	885,391	1,028,059	1,307,263	1,422,127	
2,079,490	2,495,898	3,050,150	3,224,513	2,168,996	2,612,928	3,144,826	3,320,811	22
550,922	937,911	1,849,033	984,474	2,327,218	2,387,284	3,562,950	2,969,731	23
51,631	76,495	131,056	82,362	217,421	232,591	300,232	257,934	
41,899	51,914	63,478	49,276	270,213	310,784	361,390	345,764	24
2,857,690	3,302,454	4,439,492	4,789,112	4,039,296	4,773,138	5,900,976	6,253,132	
382,511	373,937	313,514	316,317	1,915,311	2,807,607	2,482,160	2,482,595	25
48,485	50,421	49,086	53,085	220,506	381,616	380,056[3]	379,956	
3,151,220	292,449	490,134	969,221	7,957,211	8,307,618	18,632,448	15,505,439	26
2,208,598	307,611	480,128	677,113	4,988,051	4,958,387	10,551,080	10,336,265	
78,075	161,771	45,708	109,066	641,650	727,399	730,165	739,828	27
177,930	461,770	133,261	294,965	1,187,625	1,532,502	1,287,377	1,505,576	
3,256,246	1,613,249	1,810,403	7,786,493	8,455,658	8,375,007	14,209,382	19,634,814	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	I. Agricultural and Vegetable Products—con.					
	A. MAINLY FOOD—concluded.					
	Oils, Vegetable, for Food—					
1	Olive oil	gal.	126	2,578	185	1,278
		$	119	775	178	2,556
	Totals, Oils, Vegetable, for Food[1]	$	122,917	148,632	211,357	126,606
	Sugar and Its Products—					
2	Confectionery	lb.	4,003,898	4,288,757	4,332,113	4,794,315
		$	492,598	538,480	533,891	613,143
3	Molasses and syrups	gal.	28,185	1,139,617	28,613	34,869
		$	19,979	106,924	16,802	20,052
4	Sugar, not above No. 16 D.S.	cwt.	Nil	Nil	Nil	6
		$	–	–	–	22
5	Sugar, for refining, above No. 16 D.S.	cwt.	Nil	Nil	Nil	34
		$	–	–	–	114
6	Sugar, above No. 16 D.S., other, *n.o.p.*	cwt.	42	72	169	1,111
		$	238	386	475	3,414
	Totals, Sugar and Its Products[1]	$	512,815	645,797	551,248	636,745
7	Cocoa and chocolate	$	91,754	201,112	589,108	553,552
8	Coffee and chicory	lb.	1,442,080	1,744,528	2,495,478	1,614,802
		$	209,800	220,191	326,879	240,786
9	Spices	$	337,672	311,696	283,224	333,041
10	Tea	lb.	9,119,398	10,675,961	11,280,343	10,696,060
		$	2,489,822	2,714,461	2,998,675	3,214,952
11	Yeast	lb.	248,487	304,755	308,821	275,062
		$	32,036	26,873	22,945	20,657
12	Hops	lb.	155,310	178,559	150,277	167,577
		$	51,639	48,400	30,516	61,262
13	Liquorice	lb.	1,823	1,393	1,255	28
		$	503	427	294	18
	TOTALS, A. MAINLY FOOD[1]	$	5,245,863	5,554,113	6,367,900	6,379,692
	B. OTHER THAN FOOD.					
	Beverages, Alchoholic—					
14	Brandy	pf. gal.	99	57	1,016	1,655
		$	1,668	976	17,084	13,305
15	Gin	pf. gal.	46,607	66,177	74,591	80,671
		$	912,522	238,056	248,991	264,874
16	Rum	pf. gal.	84,210	112,890	100,444	118,226
		$	1,594,425	2,199,837	1,968,724	639,208
17	Whisky	pf. gal.	457,536	603,887	650,882	772,491
		$	9,578,598	3,710,956	3,431,055	4,166,448
18	Wines, non-sparkling and sparkling	$	165,130	168,298	167,718	112,992
	Totals, Beverages, Alcoholic[1]	$	12,434,625	6,476,669	5,987,186	5,343,996
19	Gums and resins	$	62,451	67,712	46,066	47,667
20	Oilcake	cwt.	12,014	3,223	3,908	2,133
		$	19,514	4,308	7,295	4,152
	Oils, Vegetable, not Food—					
21	Cotton-seed oil, crude	cwt.	129,501	248,009	155,387	200,185
		$	463,316	1,438,251	912,191	1,083,369
22	Oil for soap	gal.	273,351	2,102,222	667,842	1,283,124
		$	107,263	939,085	395,052	813,404
23	Peanut oil, crude	cwt.	19,398	264,384	363,874	478,673
		$	130,962	1,651,959	2,296,392	2,825,691
	Totals, Oils, Vegetable, not Food[1]	$	1,067,292	4,380,860	4,117,038	5,120,907
24	Plants, shrubs and trees	$	41,459	55,602	32,938	49,635
	Rubber and Products—					
25	Rubber, crude	lb.	19,579	282,453	986,556	176,658
		$	6,984	38,819	166,346	34,152
26	Recovered, powdered and substitute	cwt.	2,749	2,690	1,982	2,184
		$	64,301	60,622	39,942	33,401
27	Tires, pneumatic	$	54,332	30,664	59,294	105,342
	Totals, Rubber and Products[1]	$	411,302	751,285	625,280	516,482

---

[1] Totals include other items not specified. [2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
7,517	2,048	3,517	1,291	339,416	390,257	273,447	262,627	1
10,469	5,322	6,892	3,273	438,265	473,498	393,297	456,668	
60,293	52,411	36,727	32,183	638,669	717,275	682,650	661,401	
265,759	295,464	517,316	659,943	4,971,289	5,513,832	5,813,405	6,259,785	2
46,885	59,802	105,220	137,403	598,240	669,800	699,145	818,628	
180,287	279,838	501,285	498,232	9,442,507	13,594,356	14,441,657	12,604,223	3
80,388	100,788	126,947	114,010	2,334,445	2,660,693	2,217,281	2,182,848	
Nil	Nil	Nil	Nil	6,420,492	5,927,162	6,602,157	4,494,749	4
–	–	–	–	10,843,614	10,196,464	11,147,651	8,604,925	
Nil	Nil	Nil	Nil	2,330,611	3,260,887	3,607,966	4,623,821	5
–	–	–	–	3,629,557	5,487,623	6,105,954	8,735,478	
42,061	42,518	52,558	61,016	51,660	44,322	53,553	75,347	6
184,799	207,864	249,645	280,368	206,223	211,561	252,002	310,284	
323,381	384,764	500,546	543,419	17,623,398	19,242,458	20,440,887	20,663,829	
308,921	298,272	1,390,846	638,593	1,594,487	1,807,704	3,701,013	2,303,951	7
758,619	1,036,684	936,417	1,007,938	33,349,420	36,795,544	40,978,228	39,955,475	8
316,611	413,556	383,291	391,581	3,822,952	3,573,157	4,005,028	4,178,863	
142,062	163,335	235,367	209,909	862,506	845,829	936,718	848,367	9
21,019	54,922	15,547	25,115	30,370,010	37,148,787	40,620,874	37,980,035	10
4,261	6,338	3,625	5,486	7,107,322	8,153,748	9,348,409	9,846,850	
1,392,259	1,127,873	1,031,193	1,053,685	1,643,955	1,476,843	1,395,146	1,373,830	11
234,413	186,124	169,973	156,476	267,647	229,138	212,871	193,372	
631,822	690,595	325,289	486,263	1,481,511	1,509,175	1,300,092	1,416,845	12
192,154	155,017	98,711	148,031	641,846	436,912	392,096	416,335	
1,183,707	971,593	1,160,027	1,133,174	1,245,865	1,107,593	1,174,456	1,139,079	13
141,437	109,545	127,419	122,488	153,216	129,568	129,883	123,377	
19,602,553	19,822,571	25,543,867	31,299,235	67,872,973	72,143,851	88,605,608	93,827,579	
1	34	Nil	19	74,447	109,841	139,060	149,713	14
15	457	–	145	662,731	795,516	917,041	780,912	
[2]	[2]	[2]	2	52,781	70,252	77,427	84,117	15
–	–	–	24	961,723	273,100	274,935	291,265	
[2]	1	4	1	116,225	176,849	240,502	273,154	16
–	9	33	10	1,740,230	2,293,061	2,137,814	812,582	
15	11	1,183	4,760	458,735	604,340	652,331	777,624	17
215	46	14,005	66,931	9,596,079	3,719,490	3,448,351	4,235,238	
1,313	137	6,079	6,822	1,091,887	1,007,548	1,009,666	1,016,100	18
1,566	1,435	21,145	74,230	14,350,828	8,392,380	8,094,533	7,429,632	
1,367,343	1,339,981	1,726,489	1,722,341	1,692,344	1,757,319	2,023,197	2,070,789	19
39,107	132,274	145,289	357,192	94,516	209,154	220,979	467,311	20
63,650	153,453	240,846	491,487	126,571	232,218	327,019	621,864	
1,242	5	Nil	19,672	130,743	255,976	155,387	219,857	21
5,434	50	–	118,275	468,750	1,476,823	912,191	1,201,644	
2,628,070	1,193,697	1,904,621	754,522	7,100,083	9,788,338	8,685,469	11,000,233	22
897,791	593,436	934.587	381,911	2,048,848	3,786,356	3,777,816	5,516,625	
9,402	22,816	Nil	1,217	549,171	566,500	652,960	732,168	23
30,760	184,747	–	8,367	2,015,204	3,329,721	3,888,640	4,098,048	
2,107,340	2,510,019	3,171,876	3,045,181	6,787,237	11,348,208	12,004,219	15,167,090	
170,002	199,679	228,439	265,255	748,345	844,593	837,588	1,001,989	24
49,347,334	12,211,949	10,002,961	10,927,770	63,618,101	56,915,391	62,546,059	78,791,841	25
6,143,661	1,559,105	1,859,083	2,062,479	7,958,308	6,736,561	10,310,668	14,729,016	
106,069	115,810	159,322	167,932	109,178	119,201	163,229	170,805	26
432,294	474,485	653,480	758,409	509,200	558,104	720,062	813,256	
148,935	137,112	139,508	211,277	208,443	181,905	220,383	342,874	27
7,800,977	3,397,346	4,181,685	5,060,912	10,438,911	9,400,819	13,284,292	18,445,286	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	I. Agricultural and Vegetable Products—concluded.					
	B. OTHER THAN FOOD—concluded.					
	Seeds—					
1	Flaxseed	bu.	75	454	119	126
		$	375	1,955	396	762
2	Grass seed	lb.	93,460	69,300	34,154	48,483
		$	8,123	9,518	3,428	4,260
	Totals, Seeds[1]	$	269,430	203,173	208,699	443,433
	Tobacco—					
3	Tobacco, raw	lb.	34,399	66,587	67,950	176,995
		$	91,654	39,622	38,194	48,625
4	Tobacco, manufactured	lb.	101,320	95,928	104,879	109,690
		$	329,176	314,232	345,162	359,758
	Totals, Tobacco[1]	$	420,830	353,854	383,356	408,383
5	Broom corn	$	Nil	1,845	Nil	Nil
6	Turpentine, spirits of	gal.	499	819	280	251
		$	512	580	216	455
	TOTALS, B. OTHER THAN FOOD[1]	$	14,858,401	12,453,286	11,555,653	12,128,094
	Totals, Agricultural and Vegetable Products[1]	$	**20,104,264**	**18,007,399**	**17,923,553**	**18,507,786**
	II. Animals and Animal Products.					
7	Animals, living	$	84,820	90,974	169,535	229,717
8	Bone, ivory and shell products	$	48,466	63,945	80,116	108,549
9	Feathers and quills	$	35,326	26,190	36,064	56,120
	Fish—					
10	Fish, fresh	$	816	492	683	984
11	Fish, dried, salted, smoked	$	45,866	68,077	50,871	41,378
12	Fish, preserved or canned	$	42,643	48,286	65,934	55,340
	Totals, Fish[1]	$	89,325	116,855	117,488	97,702
	Furs—					
13	Furs, undressed	$	528,457	657,700	1,291,863	987,717
14	Furs, dressed	$	52,767	48,801	196,443	125,181
15	Hatters fur	$	68,648	122,330	130,622	157,385
	Totals, Furs[1]	$	663,767	845,699	1,631,091	1,317,572
16	Hair and bristles	$	13,749	23,431	37,446	49,841
17	Hides and skins, raw	cwt.	4,167	7,140	7,399	13,379
		$	44,663	80,994	85,184	157,665
	Leather, Unmanufactured—					
18	Glove leather	$	11,991	27,550	35,528	38,644
19	Tanned leather	$	56,721	121,992	86,336	186,800
20	Waxed or glazed leather	$	413,746	554,511	512,723	801,896
	Totals, Leather, Unmanufactured[1]	$	917,874	1,341,983	1,357,812	1,956,574
	Leather, Manufactured—					
21	Boots and shoes	pair	125,177	139,288	218,248	221,293
		$	237,294	260,379	331,486	371,705
22	Gloves and mitts	$	58,770	80,656	80,446	76,834
23	Harness and saddlery	$	64,788	56,441	64,883	85,568
	Totals, Leather, Manufactured[1]	$	473,040	529,699	618,956	684,960
	Meats—					
24	Canned meats	lb.	18,282	43,330	557,032	54,977
		$	10,295	10,824	54,686	16,958
25	Pork, in brine	lb.	Nil	Nil	Nil	Nil
		$	-	-	-	-
	Totals, Meats[1]	$	87,947	219,745	254,707	145,217

---

[1] Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
85	141	218	19	840,662	797,917	1,145,166	1,324,483	1
233	352	557	60	935,883	876,505	1,435,637	1,781,127	
2,622,271	837,658	1,968,881	1,411,177	2,852,468	1,109,759	2,260,983	1,716,071	2
226,015	62,525	136,972	107,170	257,043	111,286	177,563	161,931	
644,790	312,003	388,072	390,918	2,286,168	1,780,603	2,441,743	2,969,214	
9,091,147	5,174,460	2,744,710	2,395,896	9,414,889	5,772,638	3,006,175	2,645,439	3
2,153,105	1,555,889	838,172	878,792	2,616,637	2,069,117	1,051,510	994,984	
45,811	46,491	57,597	61,687	166,995	160,147	182,103	189,667	4
60,728	61,316	74,529	79,176	430,124	412,172	458,978	479,035	
2,213,833	1,617,205	912,701	957,968	3,046,761	2,481,289	1,510,488	1,474,019	
379,676	301,504	258,041	214,859	424,012	333,546	298,880	262,182	5
928,073	930,809	1,177,898	1,340,084	928,572	931,708	1,178,258	1,340,335	6
450,788	424,863	477,945	476,924	451,300	425,657	478,237	477,379	
15,999,920	11,137,189	12,723,955	14,816,330	41,545,622	38,198,681	42,794,609	52,507,827	
35,602,473	**30,959,760**	**38,267,822**	**46,115,565**	**109,418,595**	**110,342,532**	**131,400,217**	**146,335,406**	
795,919	540,394	547,565	1,099,118	931,937	696,998	812,702	1,402,697	7
137,327	136,761	163,342	152,534	357,247	374,038	386,812	404,082	8
36,972	55,283	72,048	57,554	121,805	128,138	161,460	170,573	9
342,769	298,406	336,557	324,691	570,302	462,813	623,802	735,688	10
31,581	41,970	41,654	36,576	332,565	307,806	293,061	255,078	11
165,676	183,983	207,831	233,269	768,464	955,334	1,164,548	1,019,418	12
540,026	524,359	586,042	594,536	1,671,331	1,725,953	2,081,411	2,010,184	
1,739,385	2,691,503	3,481,891	2,639,364	2,694,578	3,965,185	5,513,902	4,343,450	13
476,071	690,233	912,439	687,916	947,566	1,096,830	1,672,712	1,354,581	14
76,888	241,777	220,977	137,350	429,027	886,838	915,329	824,810	15
2,334,148	3,674,730	4,706,597	3,638,502	4,135,464	6,022,268	8,208,740	6,821,777	
332,737	466,095	527,528	664,290	390,357	528,570	711,151	818,982	16
194,101	142,021	165,394	116,107	333,013	404,708	381,128	356,870	17
1,613,392	1,541,221	2,105,281	1,706,310	3,086,167	4,519,627	5,253,091	5,457,361	
312,949	403,847	451,601	405,650	340,490	434,053	488,825	444,298	18
21,314	27,875	23,148	35,927	78,574	150,107	110,600	228,368	19
1,039,571	1,159,201	930,242	714,021	1,492,682	1,782,926	1,498,006	1,555,030	20
1,486,330	1,701,539	1,559,896	1,272,407	2,467,457	3,132,509	2,992,888	3,290,318	
98,008	117,908	134,023	170,206	301,841	316,472	475,300	552,016	21
291,268	348,482	372,912	442,193	612,929	677,162	836,513	998,933	
3,931	6,574	11,174	10,314	799,351	771,546	735,265	928,512	22
38,253	37,479	43,743	58,517	106,933	95,599	110,321	149,464	23
537,098	594,593	643,760	761,957	1,851,392	1,898,436	2,052,541	2,492,504	
77,499	69,889	158,509	106,163	10,451,945	12,315,651	12,112,526	11,843,511	24
10,073	8,537	16,083	12,044	506,033	578,245	601,422	669,947	
3,557,691	617,325	2,452,158	2,285,868	3,557,691	617,325	2,452,158	2,285,868	25
261,983	66,376	242,347	271,326	261,983	66,376	242,347	271,326	
408,030	147,957	349,533	410,294	1,018,298	964,164	1,147,349	1,260,157	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	II. Animals and Animal Products—concluded.					
	Milk and Its Products—					
1	Butter	lb.	539,128	8,032	49,112	901,276
		$	84,401	1,345	10,082	225,467
2	Cheese	lb.	43,760	47,353	61,035	48,818
		$	14,035	15,026	18,883	16,555
	Totals, Milk and Its Products[1]	$	100,986	21,312	35,175	246,474
	Oils, Fats, Greases—					
3	Fish oils	gal.	7,376	16,254	51,836	80,804
		$	28,133	32,288	82,844	129,846
4	Grease for soap and leather	cwt.	5,137	6,296	7,530	7,339
		$	15,886	20,915	28,045	25,157
5	Lard and compounds	lb.	8,871	17,516	6,551	4,077
		$	409	1,022	444	232
	Totals, Oils, Fats, Greases[1]	$	77,095	120,866	124,775	170,236
6	Eggs in the shell	doz.	48	29	296	273
		$	149	143	712	461
7	Eggs, *n.o.p.*	$	754	402	232	921
8	Gelatine, edible	lb.	876,534	614,734	868,231	892,238
		$	194,113	132,707	207,248	241,175
9	Sausage casings	$	60,734	4	94,040	21,438
	Totals, Animals and Animal Products[1].	$	**3,038,530**	**3,792,424**	**5,070,766**	**5,752,255**
	III. Fibres and Textiles.					
	Cotton and Its Products—					
10	Cotton, raw	lb.	453,261	73,031	138,835	356,007
		$	68,759	14,131	25,612	58,055
11	Cotton linters	lb.	Nil	43,644	55,811	Nil
		$	–	3,090	1,925	–
12	Cotton yarn	lb.	4,605,901	4,707,644	4,741,903	4,910,080
		$	2,235,729	2,324,179	2,458,341	2,763,071
13	Fabrics, bleached	lb.	1,352,332	1,397,226	1,427,376	911,228
		$	705,652	682,013	676,661	509,096
14	Fabrics, unbleached	lb.	2,915,393	2,678,185	2,780,595	3,904,064
		$	901,463	810,584	927,044	1,501,219
15	Fabrics, piece dyed	lb.	3,105,587	3,380,584	3,609,819	3,067,073
		$	1,646,066	1,750,219	1,829,766	1,740,248
16	Fabrics, yarn dyed	lb.	667,341	735,444	865,476	901,945
		$	357,830	394,902	475,338	546,412
17	Fabrics, printed	lb.	2,033,356	2,012,025	1,980,096	1,395,135
		$	1,153,768	1,105,865	1,055,251	843,645
18	Velveteens and corduroys	lb.	482,060	509,388	445,546	78,980
		$	412,062	461,114	428,285	78,043
19	Embroideries	$	30,735	144,114	131,918	160,304
20	Handkerchiefs	$	407,433	459,653	415,605	465,504
21	Lace	$	456,451	452,555	409,196	281,872
22	Wearing apparel	$	210,767	269,294	326,802	373,016
	Totals, Cotton and Its Products[1]	$	10,246,727	10,794,963	11,253,443	12,017,666
	Flax, Hemp, and Jute—					
23	Hemp, dressed or undressed	cwt.	224	Nil	Nil	Nil
		$	711	–	–	–
24	Flax, hemp, and jute yarn	lb.	4,310,273	4,455,585	4,545,503	4,239,512
		$	458,968	514,448	639,516	633,920
25	Linen thread	lb.	248,172	322,029	256,090	250,245
		$	231,458	309,784	251,122	246,534
26	Fabrics of flax or hemp	$	910,931	1,024,614	1,078,495	1,034,910
27	Fabrics of jute	yd.	5,509,516	5,180,098	4,231,855	5,075,979
		$	451,176	445,882	418,117	507,596
28	Handkerchiefs	$	436,430	462,377	478,128	482,959
29	Towels	$	197,019	180,398	157,017	167,450
	Totals, Flax, Hemp, and Jute[1]	$	3,754,909	4,066,803	4,331,836	4,606,524

---

[1] Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
15,976	68,229	57,048	10,723	878,586	164,923	112,745	4,914,890	1
4,731	18,686	17,409	3,705	139,398	39,746	29,368	1,323,543	
131,795	151,962	176,472	82,217	967,472	1,292,169	1,346,897	1,326,491	2
39,122	53,713	53,169	24,975	262,189	326,886	331,031	315,377	
65,340	88,748	98,631	103,284	430,690	395,864	407,324	1,767,419	
46,222	42,996	100,100	68,688	281,155	346,221	449,007	411,311	3
41,312	47,295	158,123	130,216	225,115	259,594	435,965	457,185	
120,272	69,584	46,269	16,023	138,352	111,960	80,615	138,304	4
486,684	483,865	287,517	122,786	549,566	702,583	444,027	731,656	
1,590,602	27,716	236,107	61,603	1,755,447	728,560	485,761	515,635	5
63,531	3,647	18,254	7,665	70,375	59,275	33,081	32,155	
827,352	827,562	564,289	312,282	1,202,552	1,493,990	1,214,029	1,511,029	
21,563	94,564	37,249	16,656	31,363	101,602	51,647	27,010	6
11,602	29,786	18,858	9,032	15,322	32,434	24,499	13,072	
10,805	41,252	69,206	75,353	47,220	50,716	89,377	76,864	7
147,605	182,601	185,642	73,403	2,045,266	2,113,026	2,221,834	2,244,658	8
100,240	89,082	96,511	28,148	523,213	501,285	519,189	500,576	
278,119	189,465	50,873	39,698	1.101,363	1,178,476	915,525	1,217,608	9
9,827,680	**10,973,245**	**12,659,575**	**11,621,353**	**19,957,477**	**24,314,220**	**27,863,224**	**30,399,795**	
131,650,373	131,352,641	143,748,459	148,520,301	138,025,066	136,555,504	147,836,584	151,361,351	10
17,096,928	16,402,279	19,257,365	16,957,618	18,111,446	17,209,869	19,905,775	17,444,618	
5,083,562	5,604,362	5,689,292	8,201,050	5,290,802	5,849,244	6,194,830	8,506,126	11
288,157	323,301	331,923	395,595	301,397	338,557	357,352	414,262	
301,308	378,235	354,772	887,829	4,917,855	5,098,422	5,117,518	5,821,727	12
174,898	220,619	204,322	402,406	2,430,096	2,563,673	2,679,451	3,186,667	
419,608	410,704	436,183	146,391	1,822,349	1,829,750	1,897,520	1,089,835	13
232,105	217,454	211,537	78,898	1,025,520	928,676	918,998	625,670	
2,372,573	2,408,621	3,571,267	3,669,184	5,297,703	5,091,807	6,360,392	7,593,770	14
657,891	582,270	971,099	1,046,751	1,565,676	1,398,396	1,902,333	2,555,591	
549,979	831,107	1,025,063	1,173,853	4,217,379	5,044,944	5,643,255	5,222,604	15
420,612	534,197	645,983	691,255	2,380,295	2,662,660	2,910,018	2,875,876	
113,264	232,533	296,698	350,635	897,596	1,240,762	1,593,738	2,058,827	16
73,251	131,999	180,461	211,385	494,136	659,030	842,030	1,100,884	
387,030	394,840	565,161	951,186	2,517,800	2,528,904	2,672,659	2,550,798	17
360,726	311,266	424,847	632,371	1,586,190	1,488,849	1,549,964	1,598,250	
25,927	33,476	47,241	52,409	528,928	594,661	716,305	572,525	18
26,183	33,165	45,552	50,435	454,599	527,277	584,804	349,258	
4,518	17,563	59,431	63,568	83,498	242,464	231,060	276,678	19
2,535	8,951	15,738	8,309	513,180	599,435	609,771	701,322	20
22,616	24,567	22,656	17,942	635,107	545,571	519,193	381,276	21
198,521	242,694	391,050	431,296	1,121,838	1,213,638	1,341,304	1,484,943	22
20,415,256	19,986,613	23,935,467	22,201,613	33,514,397	33,572,292	38,087,820	37,513,086	
2,985	2,404	1,876	3,142	19,166	19,324	47,848	9,590	23
29,631	34,084	17,141	35,466	76,966	102,585	348,682	80,685	
80,541	90,888	234,845	164,377	4,484,477	4,692,048	4,986,469	4,785,197	24
17,618	18,272	43,617	36,884	493,963	554,673	705,223	723,022	
2,207	932	1,476	2,178	250,455	323,145	261,280	258,339	25
2,625	1,127	1,956	2,917	234,164	311,231	253,803	252,983	
13,183	15,521	23,574	29,202	936,033	1,047,646	1,107,322	1,087,630	26
346,670	477,808	332,291	46,653	75,518,443	80,574,104	99,891,079	104,486,872	27
17,239	21,743	16,464	2,499	3,255,833	3,297,923	3,611,946	3,872,285	
2,440	2,188	2,282	3,006	514,939	582.990	613,201	592,104	28
1,130	950	4,639	2,866	211,643	192,704	199,243	224,861	29
516,838	510,733	674,244	714,668	7,811,445	8,423,237	9,526,053	10,293,829	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	III. Fibres and Textiles—concluded.					
	Silk and Its Products—					
1	Silk, raw	lb.	Nil	Nil	Nil	6,775
		$	–	–	–	11,627
2	Velvets and plushes	$	20,889	34,847	24,325	37,014
3	Other silk fabrics	$	78,406	99,430	137,982	142,517
4	Wearing apparel	$	108,777	134,514	154,243	146,277
	Totals, Silk and Its Products[1]	$	328,963	416,080	513,988	683,424
	Wool and Its Products—					
5	Wool, raw	lb.	4,824,587	6,617,868	6,582,608	4,429,243
		$	1,139,922	1,624,398	1,990,866	1,752,192
6	Noils	lb.	580,854	701,616	701,923	584,784
		$	265,684	305,535	392,157	334,617
7	Worsted tops	lb.	7,269,135	10,290,698	10,515,116	8,485,654
		$	3,168,297	4,585,797	5,518,984	5,183,495
8	Woollen yarn	lb.	2,936,672	3,363,525	3,423,436	3,520,293
		$	2,317,695	2,587,173	2,840,345	3,166,808
9	Carpets and rugs	$	184,245	200,812	287,785	363,314
10	Dress goods to be dyed	lb.	1,304,232	1,330,830	1,334,920	1,409,040
		$	1,375,542	1,363,558	1,437,263	1,686,906
11	Overcoatings	lb.	171,730	812,028	1,180,008	1,628,272
		$	160,278	710,011	1,055,450	1,666,168
12	Tweeds	lb.	1,300,831	1,366,002	1,436,403	1,172,130
		$	1,194,655	1,227,214	1,339,839	1,182,004
13	Worsteds and serges	lb.	2,321,271	3.403,409	4,087,034	4,823,353
		$	2,985,839	3,942,599	4,814,633	6,279,711
14	Blankets	lb.	396,463	548,381	790,653	689,436
		$	185,379	250,127	411,740	420,441
15	Socks and stockings	doz. pr.	84,839	91,520	109,644	126,220
		$	340,617	357,127	439,031	529,513
16	Other wearing apparel	$	791,827	900,707	1,081,521	1,026,676
	Totals, Wool and Its Products[1]	$	16,875,396	19,785,339	23,184,795	25,398,969
	Silk, Artificial—					
17	Silk yarn, artificial	lb.	411,465	445,949	996,624	1,364,384
		$	317,744	337,469	685,395	893,425
18	Fabrics, artificial silk	$	809,469	469,951	980,955	1,256,110
	Totals, Artificial Silk[1]	$	1,204,626	892,689	1,770,466	2,259,611
19	Fibre, manila	cwt.	664	Nil	Nil	Nil
		$	1,375	–	–	–
20	Fibre, sisal, istle, etc	cwt.	14,665	3,595	1,336	1,694
		$	47,271	14.084	8,706	17,675
21	Binder twine	cwt.	79,241	90,080	111,355	75,582
		$	534,084	567,701	921,127	648,452
22	Fishing lines	$	962,024	1,004,407	1,158,354	1,278,082
23	Gloves	$	135,507	179,616	152,576	154,701
24	Hats and caps	$	180,987	220,512	270,871	261,865
25	Oilcloth	lb.	1,688,581	2,367,755	3,010,520	4,034,359
		$	165,975	216,713	278,356	390,562
26	Rags and waste	cwt.	38,923	54,584	62,900	54,146
		$	195,136	344,682	485,486	460,828
27	Surgical dressings	$	138,424	230,386	187,463	210,273
	Totals, Fibres and Textiles[1]	$	**36,537,696**	**40,594,719**	**46,633,288**	**50,668,409**
	IV. Wood, Wood Products and Paper.					
	Wood, Unmanufactured—					
28	Logs	M ft.	Nil	Nil	Nil	Nil
		$	–	–	–	–
29	Railroad ties	No.	Nil	Nil	Nil	90
		$	–	–	–	210
30	Lumber	M ft.	15	8	24	78
		$	3,017	2,191	3,331	9,212
31	Veneers	$	6,276	5,862	5,374	9,721
	Totals, Wood, Unmanufactured[1]	$	10,264	9,783	10,531	23,070

---

[1] Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
2,586,181	2,878,284	2,191,196	2,369,001	2,692,693	3,001,902	2,318,030	2,457,274	1
3,655,014	4,904,668	4,062,250	4,416,057	3,837,406	5,115,544	4,295,726	4,608,688	
292,949	298,921	271,266	157,566	646,731	577,332	465,319	325,027	2
359,642	365,168	464,520	390,804	1,235,524	1,237,443	1,281,543	1,308,724	3
521,641	371,984	419,163	326,241	810,927	649,718	732,095	660,168	4
4,990,911	6,123,129	5,395,986	5,546,439	6,915,313	8,066,547	7,311,657	7,716,332	
1,042	3,274	3,336	4,785	12,012,265	19,219,073	23,771,236	21,358,266	5
869	2,306	1,839	2,992	2,765,921	3,969,519	6,476,705	7,379,315	
215	Nil	438	Nil	630,471	780,671	999,193	683,188	6
114	–	233	–	278,665	326,624	485,704	374,292	
1,012	873	6,615	25,086	8,459,877	12,966,686	12,480,068	10,047,388	7
704	777	6,267	11,305	3,845,209	5,844,162	6,616,297	6,168,942	
4,614	4,533	8,817	3,479	2,956,781	3,380,525	3,449,483	3,564,884	8
7,784	7,927	13,699	4,869	2,368,962	2,637,026	2,899,099	3,252,713	
11,064	21,681	57,106	26,177	575,072	557,486	709,740	919,935	9
Nil	Nil	Nil	63	1,329,555	1,343,716	1,339,889	1,413,738	10
–	–	–	141	1,401,720	1,376,227	1,443,330	1,694,068	
245	380	488	1,042	180,243	830,557	1,188,439	1,674,005	11
588	647	750	1,599	183,757	733,315	1,073,369	1,725,385	
1,719	739	186	527	1,311,757	1,383,125	1,440,600	1,179,583	12
4,252	1,835	599	1,376	1,214,775	1,254,583	1,348,461	1,192,686	
2,992	3,267	3,647	1,293	2,356,906	3,441,185	4,129,775	4,946,946	13
8,473	8,544	10,318	3,518	3,060,219	4,027,717	4,902,746	6,458,868	
2,072	2,147	2,182	5,123	398,926	551,002	793,699	694,925	14
2,446	2.931	2,006	4,519	188,064	253,543	414,495	425,439	
89	193	259	116	85,911	92,749	110,871	127,225	15
499	794	1,060	760	348,323	364,090	445,230	536,193	
99,580	119,397	141,329	135,015	968,625	1,101,207	1,303,831	1,235,548	16
261,075	270,674	381,279	330,174	20,301,393	24,460,824	30,152,054	33,647,081	
128,868	300,550	127,738	101,418	965,341	1,078,504	1,410,756	1,829,438	17
108,841	195,671	112,051	98,938	662,553	670,349	919,844	1,209,343	
200,302	247,714	369,445	380,566	1,171,302	863,328	1,670,480	1,978,150	18
419,979	659,127	870,219	998,927	2,141,239	1,945,377	3,186,546	3,955,233	
48,977	10,718	2,315	13,221	134,334	99,525	33,823	73,199	19
187,025	38,509	14,039	130,787	464,907	467,341	214,422	574,861	
152,740	226,329	251,211	188,957	290,245	524,171	551,985	332,708	20
518,714	765,502	1,243,910	1,037,442	972,958	1,950,718	2,885,450	1,781,299	
400	8,632	506	3,543	196,904	266,363	266,692	116,702	21
2,950	59,389	3,947	29,129	1,244,504	1,654,697	2,019,374	955,422	
274,315	274,148	297,378	282,247	1,369,252	1,379,865	1,562,467	1,700,598	22
4,338	7,860	14,597	18,658	280,042	460,313	527,426	502,403	23
212,244	194,176	237,564	232,663	560,738	515,015	595,671	601,654	24
79,083	347,963	1,497,435	1,725,710	1,768,278	2,716,354	4,511,565	5,808,713	25
20,211	60,368	200,927	273,709	186,433	277,270	479,418	666,871	
282,416	317,798	366,282	386,027	372,882	442,112	523,558	518,897	26
1,133,652	1,344,854	1,712,602	1,751,019	1,592,444	2,041,364	2,814,478	2,790,925	
31,907	34,823	36,792	43,913	173,120	268,518	227,400	256,377	27
30,562,261	**32,094,435**	**37,176,542**	**36,151,574**	**81,798,280**	**89,814,164**	**104,811,304**	**108,932,093**	
28,615	8,973	4,861	7,595	29,143	9,075	4,865	7,598	28
385,792	158,581	88,425	123,603	389,274	160,796	88,571	123,783	
160,948	187,064	188,521	309,881	160,948	187,064	188,521	309,971	29
211,051	251,294	256,368	403,976	211,051	251,294	256,368	404,186	
57,705	73,153	100,208	113,235	58,370	73,630	100,661	113,903	30
2,376,311	2,865,014	3,964,469	4,396,835	2,407,248	2,897,853	3,995,014	4,459,866	
281,707	512,844	512,670	449,529	323,796	546,166	563,230	506,744	31
3,701,915	4,169,457	5,204,280	6,067,762	3,829,144	4,307,124	5,408,587	6,302,515	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	IV. Wood, Wood Products and Paper—concl.					
	Wood, Manufactured—					
1	Cork manufactures	$	59,748	64,823	72,220	60,543
2	Furniture	$	99,180	104,085	140,713	154,010
3	Staves	$	Nil	Nil	Nil	Nil
4	Wood-pulp	cwt.	"	200	"	"
		$	-	809	-	-
	Totals, Wood, Manufactured[1]	$	235,417	247,255	288,206	328,576
	Paper—					
5	Boxes and containers	$	26,544	31,136	45,081	54,834
6	Paper board	lb.	394,925	601,511	526,596	591,398
		$	30,838	46,589	53,334	64,265
7	Printing paper	lb.	1,945,134	2,049,729	1,924,999	1,707,393
		$	148,777	153,961	145,921	152,514
8	Wrapping paper	lb.	455,582	547,809	443,692	503,368
		$	26,301	33,009	23,090	43,901
	Totals, Paper[1]	$	1,010,268	1,101,114	1,208,352	1,365,379
	Books and Printed Matter—					
9	Advertising pamphlets, etc	lb.	365,795	384,537	446,526	444,352
		$	140,476	160,995	160,200	173,981
10	Bibles, prayer books, etc	$	115,759	121,527	106,678	107,838
11	Newspapers and magazines	$	254,397	340,083	394,465	364,779
12	Photographs, chromos, etc	$	49,526	55,556	65,373	66,186
13	Text books	$	404,685	408,839	468,430	523,859
	Totals, Books and Printed Matter[1]	$	1,995,836	2,155,244	2,254,729	2,235,682
	Totals, Wood, Wood Products and Paper[1]	$	**3,251,785**	**3,513,396**	**3,761,818**	**3,952,707**
	V. Iron and Its Products.					
14	Iron ore	ton	33	288	Nil	Nil
		$	424	3,837	-	-
15	Pigs, ingots, etc	cwt.	142,316	106,422	182,801	87,328
		$	152,154	115,129	236,497	199,775
16	Scrap iron or steel	ton	32	15	3	82
		$	80	41	15	1,208
17	Castings and forgings	$	421,706	512,606	502,614	637,499
	Rolling-mill Products—					
18	Band and hoop	cwt.	34,467	43,703	43,588	32,858
		$	208,511	251,189	343,727	421,481
19	Bars, including rails	cwt.	84,675	91,697	104,296	158,270
		$	529,097	585,755	719,366	1,183,912
	Plates and Sheets—					
20	Plates	cwt.	100,826	157,302	194,867	295,135
		$	204,278	326,961	421,950	732,495
21	Sheets, galvanized	cwt.	101,320	163,553	175,348	212,821
		$	325,828	530,183	586,059	942,784
22	Sheets for galvanizing	cwt.	240,380	130,955	175,547	195,334
		$	596,088	319,528	496,253	564,293
23	Sheets for tinning	cwt.	178,190	204,401	219,060	53,791
		$	538,163	602,033	644,396	163,035
24	Sheets, other	cwt.	293,528	476,989	340,533	377,027
		$	814,402	1,285,702	977,970	1,439,115
25	Skelp	cwt.	10,941	21,918	21,316	12,299
		$	23,074	47,228	41,830	32,283
26	Tin plate	cwt.	1,594,349	1,537,085	1,642,049	1,824,476
		$	7,350,346	7,511,760	8,001,612	11,392,103
	Totals, Plates and Sheets[1]	cwt.	2,519,534	2,692,203	2,768,720	2,970,883
		$	9,852,179	10,623,395	11,170,070	15,266,108
27	Structural iron and steel	ton	8,810	14,234	6,152	3,856
		$	310,094	502,149	247,743	185,916
	Totals, Rolling-mill Products[1]	$	10,899,881	11,962,488	12,480,906	17,057,417

---

[1] Totals include other items not specified.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
168,378	192,007	286,667	378,567	468,477	456,646	650,013	846,029	1
299,924	364,021	746,446	819,599	487,969	564,988	971,243	1,102,192	2
201,332	200,222	223,338	226,783	201,332	200,222	223,338	226,825	3
226,506	314,561	403,264	392,730	226,730	325,737	403,522	392,730	4
359,554	510,459	650,385	657,417	361,574	529,926	651,070	657,417	
2,050,518	2,394,086	3,296,132	3,921,252	2,736,176	3,092,684	4,128,282	4,974,550	
252,818	222,312	377,071	432,702	292,890	265,142	437,366	501,019	5
10,917.078	13,476,995	16,881,417	21,168,445	11,630,383	14,753,408	18,336,454	22,422,289	6
421,939	563,254	756,658	977,455	468,380	635,130	843,300	1,075,902	6
4,241,286	4,676,617	4,505,664	4,553,519	7,178,007	7,957,532	7,958,828	7,519,147	7
398,904	434,276	489,678	508,002	634,855	680,612	745,919	760,226	
3,724,951	2,931,551	2,423,378	2,420,608	5,031,587	4,199,465	4,073,765	3,735,062	8
293,382	265,596	259,126	283,789	358,364	335,291	347,620	380,691	
3,699,850	4,015,053	4,955,607	5,706,905	5,600,024	5,989,251	7,060,499	7,984,806	
2,104,678	2,298,716	3,113,735	3,268,824	2,529,310	2,743,154	3,625,522	3,793,014	9
826,171	942,706	1,323,319	1,463,450	995,239	1,130,453	1,511,322	1,671,549	
108,927	135,160	131,889	143,893	338,311	365,260	362,783	406,962	10
2,539,724	2,927,171	4,507,233	6,261,241	2,803,524	3,275,745	4,910,045	6,640,581	11
206,941	249,964	284,144	337,193	267,952	321,304	365,431	417,973	12
455,576	478,969	576,309	758,526	954,198	977,527	1,128,442	1,376,765	13
6,593,535	7,284,803	9,604,884	12,134,229	9,034,343	9,882,572	12,330,352	14,959,310	
16,048,818	**17,863,399**	**23,060,903**	**27,830,148**	**21,199,687**	**23,271,631**	**28,927,720**	**34,221,181**	
686,857	764,262	751,182	1,418,079	1,060.843	1,431,111	1,325,195	2,174,559	14
1,260,915	1,572,932	1,584,701	3,398,761	1,975,532	2,829,987	2,638,731	4,817,841	
355,341	238,019	136,940	310,356	506,382	395,394	323,963	421,335	15
674,622	474,392	411,028	773,433	857,459	661,854	662,695	1,131,268	
60,558	101,051	70,062	169,837	67,453	101,997	72,670	173,753	16
435,984	600,822	613,129	1,971,054	470,444	607,406	629,739	2,012,815	
1,824,155	1,818,245	1,557,108	2,617,257	2,257,587	2,331,413	2,065,465	3,255,655	17
377,450	538,495	691,539	678,413	429,593	603,394	759,575	741,381	18
1,396,536	1,913,035	2,492,736	2,827,761	1,712,246	2,283,478	2,969,961	3,443,980	
629,465	548,595	801,335	695,967	773,189	737,996	1,025,690	999,607	19
1,578,975	1,487,210	2,092,837	2,411,320	2,319,202	2,358,703	3,211,601	4,209,245	
138,947	187,632	328,079	763,210	260,295	360,910	537,815	1,063,695	20
304,330	422,781	760,650	2,018,872	544,160	774,994	1,209,709	2,766,771	
34,700	87,032	74,713	113,370	137,290	258,504	278,976	339,228	21
135,864	333,014	305,255	510,485	466,310	883,923	969,651	1,505,262	
23,575	5,767	334	6,282	263,955	136,722	175,881	201,616	22
52,678	13,901	1,970	20,539	648,766	333,429	498,223	584,832	
35,550	13,115	1,077	187,421	213,740	217,516	220,137	241,212	23
135,888	45,854	3,674	646,654	674,051	647,887	648,070	809,689	
906,877	1,261,847	1,616,725	1,888,963	1,227,068	1,785,689	2,015,705	2,295,803	24
2,694,776	3,633,281	4,785,758	6,449,424	3,567,175	5,017,865	5,886,662	7,987,016	
1,270,477	1,450,979	1,669,658	1,614,018	1,372,652	1,735,994	1,971,208	1,850,001	25
2,298,927	2,590,297	3,089,089	3,510,077	2,431,917	2,955,046	3,452,541	3,955,877	
55,543	64,220	399,027	500,372	1,649,952	1,603,517	2,042,112	2,325,056	26
280,309	313,755	1,974,405	2,484,105	7,631,123	7,840,011	9,980,990	13,877,823	
2,465,669	3,070,592	4,089,613	5,073,636	5,124,952	6,098,852	7,241,834	8,316,611	
5,902,765	7,352,883	10,920,801	15,640,156	15,963,502	18,453,155	22,645,846	31,487,270	
24,588	26,519	48,408	61,165	35,600	44,466	59,727	70,797	27
1,003,741	1,075,319	2,055,484	3,101,853	1,379,388	1,674,505	2,441,041	3,499,757	
9,917,874	11,851,580	17,597,625	24,123,771	21,412,574	24,805,933	31,351,446	42,895,952	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	V. Iron and Its Products—concluded.					
	Tubes and Pipes—					
1	Boiler tubes	$	170,191	183,113	171,047	309,182
2	Seamless tubing, 5c. per lb. and over	$	83,007	111,211	148,494	269,910
3	Wrought or seamless tubing	$	47,221	61,679	289,949	64,460
4	Fittings for pipe	$	533	251	961	13,879
	Totals, Tubes and Pipes[1]	$	310,584	362,708	617,087	663,095
5	Wire	$	982,810	1,057,495	1,308,138	1,509,693
6	Chains	$	106,324	120,056	134,608	216,856
	Engines and Boilers—					
7	Automobile engines	No.	109	5	22	13
		$	36,053	5,489	14,067	34,982
8	Marine engines	No.	16	9	4	19
		$	42,571	5,875	3,821	14,651
9	Engines, diesel and parts	No.	166	424	422	329
		$	302,982	566,714	734,359	658,167
10	Other internal combustion engines	No.	428	485	745	480
		$	51,403	23,549	27,319	30,801
	Totals, Engines and Boilers[1]	$	501,192	759,976	1,005,447	1,484,136
	Farm Implements—					
11	Traction engines (farm)	No.	3	23	94	629
		$	3,199	12,271	47,407	374,694
12	Traction engine parts	$	26,561	15,632	27,133	45,481
	Totals, Farm Implements[1]	$	148,807	214,607	263,160	639,048
	Hardware and Cutlery—					
13	Cutlery	$	503,212	591,724	596,043	526,009
14	Needles and pins	$	242,208	269,369	279,140	286,068
15	Nuts and washers	$	13,082	7,949	11,675	10,780
	Totals, Hardware and Cutlery[1]	$	811,709	926,544	938,615	875,823
	Machinery—					
16	Adding machines	$	239	34	Nil	1,160
17	Air-compressing machinery	$	55,026	66,914	57,138	92,759
18	Cranes and derricks	$	3,264	5,805	45,728	90,146
19	Logging equipment	$	1,222	181	2,630	175
20	Metal-working machinery	$	147,328	170,452	228,982	288,552
21	Mining machinery	$	543,408	548,317	462,741	632,551
22	Paper-mill machines	$	8,215	26,516	27,728	51,557
23	Printing presses	$	185,963	119,635	169,532	261,293
24	Pumps, power	$	44,574	26,901	40,324	31,187
25	Sewing machines	$	81,317	118,054	98,584	124,108
26	Textile machinery	$	694,832	554,384	511,088	1,155,170
27	Typewriting machines	$	7,767	6,409	5,974	13,965
28	Washing machines	$	149	Nil	218	169
	Totals, Machinery[1]	$	2,571,652	2,476,531	2,776,280	4,278,928
29	Stamped and coated products	$	160,593	184,073	169,244	234,530
30	Tools	$	298,759	346,401	368,079	484,512
	Automobiles and Parts—					
31	Freight	No.	81	94	123	86
		$	51,198	95,022	149,277	89,972
32	Passenger	No.	162	394	1,003	1,140
		$	175,867	257,735	622,624	754,907
33	Parts of	$	76,885	125,734	185,386	172,913
	Totals, Automobiles and Parts	$	303,950[2]	478,491	957,287	1,017,792
34	Railway cars and parts	$	17,837	14,274	14,524	14,739
35	Drums, tanks, cylinders	$	38,033	26,256	11,516	17,491
36	Furniture	$	7,911	6,461	13,972	44,715
37	Stoves (except electric)	$	4,430	2,614	12,656	40,413
38	Stoves and furnaces, electric	$	12,526	5,321	8,373	9,352
39	Valves	$	18,778	26,370	54,887	73,595
	Totals, Iron and Its Products[1]	$	**18,600,768**	**20,551,388**	**23,033,333**	**31,084,817**

---

[1] Totals include other items not specified.

[2] Revised since the publication of the 1938 Year Book.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
200,233	274,421	302,653	470,890	386,433	476,289	494,873	819,229	**1**
218,738	239,435	285,099	361,284	304,283	350,942	436,030	643,223	**2**
192,465	232,170	285,816	343,249	240,044	294,048	577,224	414,964	**3**
226,736	213,487	297,658	495,128	227,269	213,830	299,537	512,233	**4**
939,983	1,058,793	1,273,788	1,782,933	1,276,185	1,446,251	1,928,253	2,546,223	
367,020	278,741	354,759	788,461	1,380,577	1,363,451	1,744,961	2,386,138	**5**
172,734	258,668	273,706	385,847	289,299	389,502	442,870	644,829	**6**
24,543	27,389	46,264	41,277	24,652	27,394	46,287	41,290	**7**
5,364,021	5,242,396	4,530,159	4,147,559	5,400,582	5,249,292	4,544,889	4,182,937	
303	529	676	783	323	553	686	818	**8**
118,908	190,512	221,095	230,222	163,315	202,523	227,221	264,475	
99	107	159	223	341	606	637	613	**9**
376,076	365,099	543,311	898,923	844,925	1,120,397	1,424,374	1,822,691	
3,511	6,405	8,946	10,146	3,940	6,894	9,692	10,630	**10**
410,978	525,131	679,397	843,924	463,763	551,179	707,989	876,312	
7,105,113	7,272,560	7,502,600	9,093,457	7,781,902	8,240,278	8,663,262	10,872,390	
815	2,664	6,148	14,312	818	2,704	6,255	14,947	**11**
633,099	2,192,178	5,573,081	12,056,336	636,298	2,216,719	5,633,049	12,441,955	
1,163,198	1,580,654	2,090,350	2,805,121	1,190,922	1,602,687	2,124,530	2,857,219	**12**
3,341,370	5,712,752	10,141,308	18,181,100	3,716,319	6,182,218	10,803,750	19,245,768	
225,254	207,813	268,733	320,923	982,432	1,055,464	1,145,193	1,137,793	**13**
80,011	88,092	103,215	110,267	354,952	382,681	413,489	434,210	**14**
313,897	351,311	241,044	274,927	327,029	360,496	253,210	286,262	**15**
1,117,330	1,155,711	1,119,692	1,178,331	2,272,405	2,412,822	2,437,225	2,476,783	
652,931	876,876	1,173,922	1,144,736	664,740	892,734	1,189,215	1,181,460	**16**
293,883	310,982	461,690	697,227	349,045	378,279	519,012	794,953	**17**
41,304	88,367	305,420	605,651	44,568	98,544	351,148	696,971	**18**
391,116	458,472	628,666	747,117	401,896	473,572	638,066	755,532	**19**
1,660,169	2,196,866	3,845,379	6,794,640	1,824,931	2,397,248	4,128,244	7,189,159	**20**
1,683,812	1,715,217	3,088,289	6,032,680	2,284,069	2,301,847	3,615,416	6,711,009	**21**
214,108	292,399	398,299	397,700	257,580	363,931	473,887	532,963	**22**
893,032	736,367	1,115,996	1,675,643	1,116,478	903,287	1,352,574	2,037,505	**23**
336,779	360,622	547,804	752,083	381,817	392,168	589,234	784,847	**24**
217,352	320,634	410,553	463,996	304,246	452,815	525,725	602,164	**25**
2,222,840	2,371,642	2,691,075	3,572,129	3,063,283	3,216,411	3,376,720	5,021,025	**26**
249,900	147,930	163,686	202,103	257,667	155,240	178,765	231,148	**27**
210,922	272,314	520,575	702,839	211,071	272,354	520,793	703,008	**28**
15,808,013	18,562,224	27,403,682	42,667,842	19,127,704	21,914,192	31,086,819	48.367,372	
887,657	949,891	1,243,829	1,405,360	1,091,240	1,181,796	1,478,720	1,725,803	**29**
835,631	960,631	1,393,674	1,658,606	1,422,119	1,645,416	2,156,538	2,625,960	**30**
856	994	2,228	2,262	940	1,091	2,354	2,348	**31**
624,579	837,026	1,912,256	2,400,484	679,130	939,896	2,063,583	2,490,456	
2,285	3,055	9,950	15,774	2,447	3,451	10,953	16,945	**32**
1,451,318	2,106,130	7,723,895	12,385,856	1,627,185	2,364,932	8,346,519	13,154,005	
22,100,263	22,580,553	27,180,371	29,532,173	22,178,231	22,706,931	27,379,705	29,725,252	**33**
24,176,160	25,523,709	36,816,522	44,318,513	24,484,546	26,011,759	37,789,807	45,369,713	
230,933	323,313	359,756	1,040,022	250,053	339,152	374,280	1,056,993	**34**
304,716	197,145	335,046	480,700	382,907	244,580	363,168	513,079	**35**
170,894	208,996	470,763	471,167	182,983	221,647	496,305	530,551	**36**
396,868	493,514	820,375	1,035,897	405,902	500,461	840,688	1,084,063	**37**
203,845	254,335	389,115	450,840	216,799	259,919	398,313	461,123	**38**
315,669	281,108	391,176	585,226	334,447	307,696	446,070	664,037	**39**
77,477,564	**88,428,437**	**121,742,147**	**170,603,311**	**100,056,145**	**114,253,715**	**150,239,139**	**209,236,711**	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	VI. Non-Ferrous Metals.					
	Aluminium—					
1	Alumina, bauxite, and cryolite	cwt.	315,104	337,436	189,342	322
		$	817,606	861,254	381,354	1,286
2	Aluminium ingots, bars, rods, plates, etc.	cwt.	11,979	14,397	16,018	19,266
		$	326,717	392,888	469,740	628,099
3	Aluminium kitchen-ware	$	3,826	2,629	4,036	8,161
	Totals, Aluminium[1]	$	1,221,603	1,389,096	1,121,371	970,048
4	Brass and manufactures	$	294,808	361,238	336,788	438,968
5	Copper and manufactures	$	127,322	156,579	139,487	190,457
6	Lead and manufactures	$	43,306	53,070	65,749	91,910
7	Nickel and manufactures	$	104,424	109,648	103,788	197,781
	Precious Metals and Manufactures—					
8	Electro-plated ware	$	244,453	259,583	279,446	149,607
9	Silver, unmanufactured	$	508,966	893,711	661,554	208,444
	Totals, Precious Metals[1]	$	899,039	1,355,098	1,363,152	1,120,563
10	Tin (totals)	$	626,421	894,962	1,113,286	954,707
11	Tin in blocks, pigs, etc.	cwt.	12,180	18,015	23,245	19,116
		$	612,065	878,869	1,099,787	941,392
12	Zinc	$	7,330	8,177	9,130	13,606
13	Alloys	$	70,958	83,944	127,888	158,516
14	Clocks and watches	$	45,675	48,526	39,725	37,703
	Electrical Apparatus—					
15	Batteries, storage	$	38,829	48,119	95,298	100,641
16	Dynamos, generators	$	33,041	65,689	157,356	186,522
17	Fixtures, electric light	$	9,338	9,823	12,360	26,104
18	Lamps, incandescent	$	1,090	1,472	37,554	9,469
19	Motors	$	190,675	239,806	243,268	463,338
20	Spark plugs, etc.	$	9,865	4,376	1,619	754
21	Switches, etc.	$	42,292	47,828	67,537	115,889
22	Telephones	$	33,760	84,091	46,875	77,462
23	Transformers	$	39,597	15,786	24,922	206,451
24	Tubes, radio	$	1,001	12,228	24,061	9,181
25	Wireless apparatus	$	82,278	77,742	131,350	190,639
	Totals, Electrical Apparatus[1]	$	699,970	1,022,964	1,279,542	2,132,015
26	Gas apparatus	$	4,885	3,586	5,398	8,586
27	Metallic articles for agr. implements, *n.o.p.*	$	16,097	11,437	9,937	7,211
28	Manganese oxide	cwt.	83	72	254	126
		$	212	199	598	383
29	Ores of metals, *n.o.p.*	$	1,598	5,998	12	389,788
30	Printing materials	$	22,050	20,900	22,794	31,303
31	Vessels, equipment for	$	181,499	115,053	106,808	182,695
	Totals, Non-Ferrous Metals[1]	$	**4,581,470**	**5,829,425**	**6,062,639**	**7,271,504**
	VII. Non-Metallic Minerals.					
32	Asbestos	$	220,218	241,362	327,950	401,040
	Clay and Clay Products—					
33	Bricks, fire	$	141,150	193,583	149,486	241,903
34	China clay	cwt.	400,021	369,276	565,551	675,237
		$	158,365	161,367	236,948	281,362
35	Tableware of china	$	2,214,922	2,538,470	2,871,083	3,384,616
	Totals, Clay and Clay Products[1]	$	2,846,834	3,173,324	3,633,362	4,317,823
	Coal and Coal Products—					
36	Anthracite coal	ton	1,608,620	1,487,490	1,320,681	1,120,488
		$	7,404,623	6,745,004	6,302,934	5,553,643
37	Bituminous coal	ton	330,646	347,894	147,089	73,797
		$	867,523	961,765	448,606	297,776
38	Coal for ships	ton	[2]	[2]	1,061	77
		$	–	–	2,737	116
39	Coke for fuel	ton	27,860	8,643	7,234	3,444
		$	114,974	40,022	32,694	19,659
	Totals, Coal and Coal Products[1]	$	8,420,489	7,754,952	6,834,386	5,984,131

---

[1] Totals include other items not specified.

[2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
1,363,339	1,745,761	1,875,106	2,372,458	1,856,059	2,578,380	3,650,911	6,037,285	1
1,398,212	1,911,057	2,056,835	2,754,055	2,553,076	2,902,275	3,040,061	4,237,225	
2,251	3,749	1,960	3,199	14,234	18,146	17,985	22,906	2
77,009	129,481	75,200	142,174	403,828	522,369	545,416	796,006	
84,376	76,366	60,430	66,748	92,639	80,747	68,564	81,780	3
2,032,171	2,646,866	2,944,919	3,825,005	3,655,202	4,224,716	4,751,819	6,431,332	
1,640,781	1,891,077	2,391,690	2,670,764	2,082,637	2,369,300	2,855,381	3,245,718	4
432,299	530,805	724,025	956,727	575,028	716,743	906,088	1,177,881	5
60,620	66,660	66,139	73,568	115,876	135,443	163,974	182,799	6
897,267	899,085	958,399	1,101,657	1,180,239	1,176,315	1,222,067	1,534,909	7
132,403	280,888	855,142	1,156,070	393,208	558,753	1,183,407	1,384,145	8
2,917,262	3,454,885	1,211,189	744,342	3,426,228	4,937,115	1,872,743	952,786	9
3,252,437	3,948,805	2,240,625	2,073,468	4,200,135	5,943,967	3,691,414	3,310,643	
1,248,147	473,601	231,385	150,040	2,206,062	2,307,535	2,496,821	2,960,777	10
23,531	8,423	3,436	2,108	42,283	45,757	51,876	57,024	11
1,210,654	418,638	156,629	108,885	2,153,515	2,236,476	2,408,521	2,906,228	
372,978	465,995	493,438	693,972	473,214	566,026	658,606	863,122	12
51,940	64,422	115,168	189,569	260,196	283,239	416,973	576,942	13
395,758	589,213	725,104	921,020	1,390,852	1,743,170	2,037,278	2,342,516	14
117,715	86,346	56,463	59,144	156,770	134,556	152,254	160,034	15
200,143	209,956	348,075	491,135	247,896	284,058	544,312	769,269	16
207,607	219,788	622,371	715,049	232,519	251,484	664,586	799,769	17
132,949	127,335	153,634	121,901	155,997	155,554	252,691	268,767	18
878,186	925,886	1,353,530	1,899,373	1,116,480	1,184,393	1,650,394	2,398,711	19
303,720	213,948	55,830	17,936	316,888	220,937	58,679	18,690	20
405,709	503,300	574,122	663,454	452,986	555,917	656,054	916,260	21
375,006	332,297	689,348	941,032	411,960	417,668	736,367	1,019,317	22
52,623	65,084	110,495	99,170	94,166	81,401	142,442	422,075	23
153,926	264,811	311,752	221,503	154,977	277,039	335,813	230,689	24
1,518,552	1,649,208	2,381,553	2,294,274	1,603,330	1,729,158	2,514,195	2,486,660	25
7,076,653	7,597,602	10,361,262	12,447,979	7,943,639	8,757,837	11,991,038	15,550,125	
104,746	118,502	129,245	135,488	115,433	125,465	143,540	157,928	26
1,045,367	1,598,090	1,382,075	2,450,545	1,070,395	1,646,682	1,431,643	2,541,011	27
27,853	36,633	39,841	45,456	619,709	737,754	1,285,095	1,543,230	28
63,975	82,892	82,957	89,089	235,453	357,866	683,945	798,939	
208,709	182,404	272,999	554,862	256,287	433,780	434,731	1,534,216	29
730,177	639,594	571,548	686,591	755,757	664,260	599,589	723,518	30
183,445	200,509	230,438	422,408	387,273	330,456	375,707	641,259	31
29,858,178	**23,305,389**	**25,400,426**	**30,954,351**	**28,496,629**	**33,685,919**	**37,037,954**	**47,063,972**	
465,075	480,995	617,244	718,828	695,323	733,499	954,487	1,133,782	32
1,346,821	1,417,685	2,041,293	2,587,628	1,488,587	1,612,408	2,190,930	2,835,033	33
245,495	345,872	305,247	404,333	646,613	715,664	870,820	1,082,309	34
94,600	127,916	114,765	156,323	254,424	289,755	351,721	439,221	
18,072	25,565	29,158	36,397	2,694,903	3,042,463	3,320,207	3,786,886	35
2,532,232	2,711,582	3,400,560	4,162,966	6,094,940	6,593,645	7,744,156	9,174,600	
1,750,853	1,701,101	1,607,410	2,023,972	3,449,139	3,499,857	3,374,854	3,612,973	36
10,431,064	9,959,785	9,291,075	10,757,958	18,112,854	17,788,829	17,310,207	17,927,824	
8,762,949	8,250,148	9,462,616	10,554,623	9,093,959	8,598,046	9,618,618	10,661,189	37
16,087,803	14,476,215	16,392,562	19,867,263	16,956,561	15,438,056	16,870,090	20,246,240	
280,366	306,039	356,243	353,734	280,366	306,039	357,304	353,811	38
536,174	586,511	660,612	725,923	536,174	586,511	663,349	726,039	
598,283	476,474	377,196	265,361	626,383	496,708	398,524	280,952	39
3,370,983	2,639,016	2,202,248	1,580,545	3,487,284	2,730,925	2,291,338	1,647,250	
31,708,568	29,306,212	30,335,051	35,234,366	40,429,524	38,197,232	38,971,240	42,965,677	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	VII. Non-Metallic Minerals—concluded.					
	Glass—					
1	Carboys, bottles, jars, etc.	$	45,378	52,570	52,241	68,066
2	Common window glass	sq. ft.	8,125,661	9,591,316	12,304,701	10,700,500
		$	294,910	330,884	430,754	368,319
3	Plate glass	sq. ft.	833,928	700,683	1,780,233	1,347,056
		$	324,618	256,391	571,252	473,130
4	Tableware of glass	$	56,079	68,362	96,509	103,944
	Totals, Glass[1]	$	947,902	925,033	1,429,446	1,391,229
5	Graphite and its products	$	48,019	52,552	51,629	75,433
	Petroleum and Asphalt—					
6	Asphalt	$	119	54	1	148
7	Crude petroleum	gal.	34,259	19,833	5,398	32,475
		$	5,254	3,168	928	6,067
8	Fuel oil for ships	gal.	[2]	[2]	[2]	[2]
		$	-	-	-	-
9	Gasoline	gal.	[2]	450	6,802	6,682
		$	-	180	653	661
10	Kerosene, refined	gal.	4	4,640	Nil	5,485
		$	7	887	-	921
11	Lubricating oils	gal.	88,529	94,520	91,142	110,512
		$	36,609	34,674	31,135	39,923
	Totals, Petroleum and Asphalt[1]	$	63,889	55,761	63,974	101,018
12	Diamond dust or bort	$	23,891	122,176	74,922	52,814
13	Sand, silica	cwt.	Nil	Nil	3,900	2,345
		$	-	-	737	403
14	Carbons, electric	$	1,552	726	1,114	1,582
15	Diamonds, unset	$	98,378	103,261	96,582	180,270
16	Salt	cwt.	653,179	574,482	683,686	651,989
		$	203,935	168,530	205,469	192,506
17	Sulphur	cwt.	779	1,337	45,324	630
		$	1,270	2,571	37,116	1,372
	Totals, Non-Metallic Minerals[1]	$	**13,163,008**	**12,932,009**	**13,102,638**	**13,092,855**
	VIII. Chemicals and Allied Products.					
18	Acids	$	325,940	448,848	550,949	668,958
19	Cellulose products (totals)	$	121,842	137,749	132,882	83,189
	Drugs and Medicines—					
20	Medicinal preparations	$	597,425	584,963	539,082	598,204
21	Preparations for spraying	$	92,224	86,171	104,562	122,674
	Totals, Drugs and Medicines[1]	$	860,572	897,396	816,147	851,865
	Dyeing and Tanning—					
22	Aniline and coal-tar dyes	lb.	534,987	565,619	707,555	702,349
		$	369,520	357,470	455,397	436,051
23	Oak, quebracho, and similar extracts	lb.	255,465	534,175	250,101	735,208
		$	7,255	18,089	9,552	27,484
	Totals, Dyeing and Tanning[1]	$	603,011	603,024	683,293	694,930
24	Explosives	$	12,464	19,795	40,681	48.012
25	Fertilizers	$	8,628	3,396	51,675	33,241
26	Glycerine	lb.	1,740,018	101,964	675,984	168,403
		$	190,001	10,270	106,969	50,491
	Paints and Varnishes—					
27	Carbon black	lb.	239	56,784	65,524	69,328
		$	27	3,098	3,543	3,624
28	Lithopone	lb.	6,557,943	7,417,130	8,367,912	9,951,902
		$	228,728	256,732	301,419	382,915
29	Oxides	lb.	1,158,317	1,204,588	1,491,019	1,621,168
		$	160,769	170,418	187,885	218,504
30	Ready-mixed paints	gal.	25,287	27,483	28,052	34,394
		$	35,141	38,374	41,080	44,437
31	Varnish	gal.	10,595	5,832	8,425	9,102
		$	20,013	11,021	14,624	14,461
32	Zinc white	lb.	10,449,275	10,410,360	10,587,291	9,913,819
		$	408,608	398,292	408,730	510,015
	Totals, Paints and Varnishes[1]	$	1,196,499	1,346,596	1,555,349	1,801,118

---

[1] Totals include other items not specified.

[2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—continued.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
365,947	505,911	770,408	892,421	569,255	702,119	1,019,011	1,187,062	1
117,360	74,637	16,498	96,194	28,988,021	33,622,574	45,418,196	40,054,610	2
6,203	4,127	1,076	3,437	873,637	903,983	1,180,394	1,109,408	
2,183,837	2,315,312	1,985,646	1,712,946	3,186,661	3,510,746	6,052,694	4,296,125	3
637,551	649,814	573,158	528,932	1,039,801	1,046,865	1,763,318	1,368,788	
488,063	558,913	572,295	595,115	751,519	884,786	991,839	1,128,353	4
2,967,887	3,318,732	3,747,325	3,959,066	5,341,828	5,798,850	7,583,043	7,792,695	
91,935	78,828	92,475	101,776	141,878	135,731	147,365	179,995	5
134,655	133,495	164,992	184,624	136,422	137,330	168,815	189,740	6
815,897,638	898,669,739	924,396,420	998,850,826	1,091,352,582	1,198,116,475	1,246,881,256	1,352,819,133	7
24,969,947	27,408,732	30,755,321	36,680,968	32,500,727	35,564,978	39,562,633	46,634,720	
23,981,591	18,643,709	20,379,589	28,380,844	24,170,241	18,643,709	20,379,589	28,380,844	8
605,132	540,300	577,554	881,975	608,773	540,300	577,554	881,975	
52,133,131	44,681,047	37,420,852	57,265,050	64,616,691	64,587,586	59,939,464	75,723,927	9
3,434,206	3,111,680	2,796,900	4,427,656	4,063,625	4,401,377	4,146,709	5,574,602	
2,038,210	1,282,973	2,917,945	4,652,207	2,039,950	1,292,271	2,918,700	4,658,492	10
153,243	114,532	232,079	339,337	153,598	116,807	232,166	340,443	
10,604,832	13,377,559	14,689,865	15,622,886	10,708,468	13,489,156	14,794,269	15,749,016	11
2,332,997	2,643,633	3,034,666	3,412,155	2,375,752	2,685,733	3,071,588	3,461,383	
32,337,858	34,778,301	39,086,041	47,828,972	40,855,283	44,489,337	49,775,547	59,263,625	
1,511,318	1,624,119	2,624,307	4,706,578	1,537,869	1,785,554	2,772,146	4,927,347	12
1,803,097	2,330,415	2,884,684	4,203,674	1,944,581	2,623,959	2,977,679	4,210,461	13
216,902	227,526	270,182	372,425	235,636	281,228	283,086	373,470	
368,552	398,279	373,490	445,303	371,217	401,166	374,939	447,522	14
40,221	49,637	36,228	113,172	649,474	865,700	1,046,076	1,237,980	15
913,960	931,597	797,233	1,011,425	2,809,141	2,532,358	2,188,525	2,364,767	16
213,758	205,742	169,279	209,359	596,113	508,792	453,655	483,734	
3,070,292	2,715,426	3,417,255	4,457,265	3,072,115	2,717,959	3,463,597	4,458,747	17
2,496,926	2,285,191	2,835,461	3,617,447	2,500,514	2,290,127	2,874,357	3,620,728	
77,256,933	**78,088,621**	**86,809,009**	**105,491,370**	**102,428,037**	**105,421,236**	**116,948,261**	**136,662,502**	
552,832	571.054	696,692	1,053,375	1,096,667	1,318,389	1,473,684	1,971,963	18
1,589,756	1,642,216	1,673,527	1,633,273	1,871,289	1,864,591	1,880,260	1,819,496	19
757,856	885,474	1,059,734	1,066,389	1,763,631	1,925,168	2,026,348	2,047,675	20
330,183	300,371	502,768	673,119	510,738	412,901	671,582	869,776	21
1,186,447	1,345,613	1,731,719	2,028,504	2,715,920	2,968,389	3,274,066	3,495,036	
2,138,001	2,387,013	2,504,405	2,332,122	4,267,888	4,585,399	5,148,175	4,902,262	22
1,083,803	1,225,588	1,366,026	1,321,707	3,211,123	3,536,124	4,036,864	3,397,730	
22,629,774	19,993,995	13,284,861	9,615,318	25,282,050	30,129,002	26,753,741	17,764,304	23
606,091	572,465	386,561	280,494	681,006	909,427	869,482	597,930	
2,141,493	2,289,751	2,254,144	2,222,133	4,853,908	5,486,921	5,975,440	5,114,017	
386,653	283,997	374,769	430,112	420,263	324,828	448,157	508,118	24
1,549,394	1,235,863	1,691,603	1,977,190	2,484,724	2,147,182	2,643,245	3,458,352	25
337,986	1,602,639	148,751	1,116,097	2,681,659	2,004,996	2,172,323	2,082,787	26
34,142	212,371	30,368	138,921	267,435	246,172	306,336	442,515	
12,789,237	12,748,100	14,826,222	15,786,429	12,789,576	12,808,870	14,915,659	15,855,757	27
612,895	600,567	685,621	605,773	612,927	603,919	690,276	609,397	
3,431,609	3,092,544	3,476,222	2,918,435	16,570,839	15,377,770	19,699,846	21,375,893	28
141,131	137,594	149,601	128,991	577,817	558,114	696,303	742,798	
4,547,800	3,278,005	4,248,593	3,577,990	6,538,997	6,458,497	6,608,193	7,755,960	29
443,167	409,356	542,238	511,478	636,198	616,793	788,527	797,853	
97,782	106,817	148,110	144,234	125,792	137,285	180,142	183,966	30
156,482	172,870	258,147	247,324	198,412	217,575	304,934	298,561	
64,862	83,925	100,166	102,917	76,022	90,507	109,660	112,753	31
117,583	161,491	172,735	162,643	139,342	174,704	190,256	178,992	
1,255,138	1,135,212	3,058,829	1,616,179	12,198,705	11,976,847	14,336,269	12,692,546	32
85,518	59,690	159,410	94,815	520,577	475,356	591,279	650,510	
1,954,822	1,987,443	2,522,492	2,349,365	3,484,897	3,620,464	4,497,644	4,603,721	

13.—Principal Imports into Canada for Consumption from United

No.	Item.		United Kingdom.			
			1935.	1936.	1937.	1938.
	VIII. Chemicals and Allied Products—concl.					
1	Perfumery	$	101,677	105,145	142,587	158,908
	Soap—					
2	Laundry soap	lb.	198,785	258,247	319,045	567,773
		$	14,564	17,200	21,762	36,972
3	Toilet soap	$	39,255	51,500	64,612	73,200
	Totals, Soap[1]	$	69,655	85,044	108,529	133,875
	Chemicals, Inorganic, *n.o.p.*—					
4	Sulphate of alumina	cwt.	75,735	82,885	105,325	127,191
		$	63,052	64,638	83,797	109,787
5	Ammonia and its compounds	$	192,256	146,756	254,104	484,429
6	Compounds of tetra-ethyl lead	lb.	[2]	[2]	[2]	38,853
		$	–	–	–	17,576
7	Chlorine, liquid	lb.	[2]	[2]	[2]	[2]
		$	–	–	–	–
8	Calcium chloride	cwt.	61,225	1,171	300	154
		$	99,556	1,289	326	218
9	Potash and potassium compounds	$	128,833	97,509	87,185	71,357
10	Soda and sodium compounds	$	836,544	935,842	1,017,527	1,049,741
	Totals, Chemicals, Inorganic, *n.o.p.*[1]	$	1,875,509	1,725,016	1,722,021	2,172,543
	Totals, Chemicals and Allied Products[1]	$	**6,210,239**	**6,336,345**	**6,957,434**	**7,706,251**
	IX. Miscellaneous Commodities.					
	Amusement and Sporting Goods—					
11	Films	$	65,448	57,257	77,154	44,761
12	Dolls	$	2,144	5,548	3,994	11,370
13	Toys	$	155,382	189,825	200,756	178,623
	Totals, Amusem't and Sporting Goods[1]	$	468,032	540,510	572,211	577,570
14	Brushes	$	125,751	129,438	140,858	140,199
15	Containers (outside coverings)	$	1,151,079	1,234,653	1,174,090	823,706
	Household and Personal Equipment—					
16	Buttons	$	10,823	14,457	13,528	14,327
17	Cases and boxes, fancy	$	100,159	114,688	146,746	161,258
18	Jewellery, *n.o.p.*	$	33,411	40,010	35,444	46,523
19	Pocket books, etc	$	144,265	158,102	170,506	180,358
20	Refrigerators	$	925	1,099	1,589	515
21	Tobacco pipes, etc	$	128,125	121,711	147,108	184,132
	Totals, Household, etc., Equipment[1]	$	746,114	794,512	879,827	962,300
22	Musical instruments	$	46,210	57,731	88,507	80,170
	Scientific and Educational Equipment—					
23	Philosophical and scientific apparatus	$	54,712	99,175	54,512	67,280
24	Surgical and dental instruments, etc	$	270,167	302,107	255,996	223,432
	Totals, Scientific and Educational Equipment[1]	$	440,015	565,617	475,934	662,969
25	Ships and vessels	$	7,998	23,343	24,653	8,575
26	Vehicles, *n.o.p.*	$	58,764	147,475	463,595	563,325
27	Works of art	$	177,679	218,518	385,235	346,443
28	Special imports	$	2,099,535	1,647,293	1,766,993	1,813,544
29	Cartridges	$	36,226	21,442	68,202	86,163
30	Electric energy	k.w.h.	Nil	Nil	Nil	Nil
		$	–	–	–	–
31	Express parcels	$	5,958	7,426	8,078	11,018
32	Pencils, lead	$	56,209	72,875	74,695	69,879
33	Post Office parcels	$	311,653	373,231	290,911	180,528
34	Precious stones	$	58,678	86,026	122,164	88,109
35	Settlers' effects	$	214,810	179,705	202,024	294,170
36	Waste paper clippings	cwt.	23,429	40,909	29,799	21,097
		$	15,963	26,410	18,942	20,417
	Totals, Miscellaneous Commodities[1]	$	**6,194,730**	**6,317,717**	**6,962,416**	**6,963,105**
	Grand Totals, Imports for Consumption	$	**111,682,490**	**117,874,822**	**129,507,885**	**144,978,493**

[1] Totals include other items not specified. [2] None reported.

Kingdom, United States, and All Countries, fiscal years 1935-38—concluded.

United States.				All Countries.				No.
1935.	1936.	1937.	1938.	1935.	1936.	1937.	1938.	
233,641	231,622	215,964	242,005	429,737	418,559	433,696	475,328	**1**
3,640,759	4,087,338	4,472,234	3,277,073	3,910,635	4,599,156	4,904,170	4,030,494	**2**
222,220	252,255	274,927	202,085	240,948	284,214	303,211	250,144	
19,641	19,692	24,368	25,452	70,951	85,015	108,717	117,635	**3**
294,470	349,239	379,772	312,306	437,597	505,797	561,482	527,020	
452,701	491,048	549,666	562,855	534,053	582,492	725,323	696,469	**4**
473,573	532,925	573,622	606,159	540,634	604,813	701,714	720,985	
41,727	45,928	51,735	102,623	272,069	233,965	351,264	636,878	**5**
1,866,148	2,545,346	3,172,675	4,686,423	1,866,148	2,545,346	3,172,675	4,725,276	**6**
1,062,182	1,322,283	1,464,848	2,112,067	1,062,182	1,322,283	1,464,848	2,129,643	
10,683,705	10,405,676	6,268,312	7,148,340	10,683,705	10,405,676	6,268,312	7,148,340	**7**
219,220	223,668	131,503	153,438	219,220	223,668	131,503	153,438	
427,635	285,419	241,465	71,695	493,761	289,939	245,331	75,794	**8**
423,335	273,665	228,527	67,813	526,057	277,109	231,805	70,678	
46,719	56,918	54,639	64,376	373,128	415,103	374,244	379,506	**9**
1,428,698	1,201,329	1,252,923	1,641,897	2,409,537	2,304,046	2,423,785	2,825,384	**10**
4,213,696	3,993,864	4,266,807	5,105,564	6,661,127	6,373,544	6,571,205	7,810,709	
17,117,656	**17,500,123**	**19,388,229**	**22,712,830**	**28,872,053**	**29,919,921**	**33,105,448**	**36,890,149**	
304,424	284,826	244,561	266,968	453,489	440,356	416,095	432,687	**11**
21,839	21,383	29,795	46,350	92,090	124,727	134,534	140,801	**12**
428,994	489,374	632,872	698,536	1,072,175	1,217,758	1,395,885	1,448,129	**13**
1,402,079	1,749,221	2,167,279	2,405,291	2,593,797	3,078,753	3,565,472	3,881,387	
85,182	112,404	156,143	164,831	305,217	302,832	396,707	418,302	**14**
569,701	350,252	410,147	487,388	2,391,737	2,283,950	2,278,666	2,034,701	**15**
118,017	139,306	199,435	168,476	251,623	228,353	311,506	267,417	**16**
145,740	160,095	322,626	399,134	351,880	396,137	642,421	727,335	**17**
396,650	415,494	461,320	535,079	636,290	621,921	653,080	792,051	**18**
207,407	256,258	400,118	427,738	488,770	552,395	726,707	818,587	**19**
216,092	330,250	868,182	1,194,735	217,017	331,349	869,916	1,195,250	**20**
21,174	44,915	54,992	50,482	397,349	426,984	421,964	492,868	**21**
2,133,355	2,557,102	3,684,842	4,281,274	4,300,884	4,485,086	5,737,375	6,562,960	
249,459	331,998	479,909	805,811	446,878	578,121	806,985	1,131,093	**22**
328,654	351,247	424,330	511,116	455,408	541,392	560,404	670,774	**23**
744,135	841,300	933,168	1,224,675	1,173,795	1,293,050	1,364,473	1,694,734	**24**
2,000,594	2,219,488	2,464,478	3,063,423	2,844,583	3,229,556	3,443,750	4,356,177	
416,748	198,817	315,524	427,790	425,151	256,736	350,857	441,709	**25**
401,041	328,446	908,978	1,830,087	463,399	478,516	1,375,572	2,395,254	**26**
276,251	210,648	833,208	1,514,227	673,636	575,458	1,363,915	2,044,340	**27**
4,604,538	5,204,711	9,532,942	11,156,316	7,501,915	7,768,446	12,151,363	14,369,999	**28**
97,564	126,965	123,698	160,779	134,652	148,905	192,743	247,667	**29**
3,665,161	4,940,659	4,882,978	3,619,908	3,665,161	4,940,659	4,882,978	3,619,908	**30**
68,110	75,292	80,785	72,863	68,110	75,292	80,785	72,863	
1,168,575	1,327,653	1,684,880	1,882,638	1,185,592	1,347,768	1,703,750	1,906,169	**31**
41,432	63,905	81,660	98,931	153,004	193,649	230,977	263,850	**32**
1,764,823	1,843,415	2,412,888	2,744,046	2,076,582	2,217,027	2,710,643	2,935,022	**33**
81,427	50,937	83,034	99,156	208,153	210,191	290,158	292,870	**34**
2,535,645	2,454,626	2,255,406	2,730,831	2,915,858	2,803,668	2,641,324	3,260,276	**35**
736,068	667,857	586,862	852,535	759,802	709,330	617,303	874,632	**36**
339,249	301,489	406,379	722,905	355,632	328,837	427,029	746,123	
18,891,409	**20,266,185**	**29,216,009**	**35,824,743**	**30,204,250**	**31,695,725**	**41,542,299**	**49,328,109**	
303,639,972	**319,479,594**	**393,720,662**	**487,328,980**	**522,431,153**	**562,719,063**	**671,875,566**	**799,069,918**	

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1934-38.

Class.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
IMPORTS.					
Agricultural and Vegetable Products (except chemicals, fibres, and wood)—					
Dutiable	64,731,623	74,225,634	68,478,004	78,995,471	83,868,367
Free	26,097,187	35,192,961	41,864,528	52,404,746	62,467,039
Totals for Group	**90,828,810**	**109,418,595**	**110,342,532**	**131,400,217**	**146,335,406**
Animals and Animal Products (except chemicals and fibres)—					
Dutiable	8,986,263	9,796,173	10,477,850	11,274,570	13,043,754
Free	10,855,614	10,161,304	13,836,370	16,588,654	17,356,041
Totals for Group	**19,841,877**	**19,957,477**	**24,314,220**	**27,863,224**	**30,399,795**
Fibres, Textiles, and Textile Products—					
Dutiable	35,918,439	36,788,973	38,575,440	44,807,865	51,352,707
Free	43,454,031	45,009,307	51,238,724	60,003,439	57,579,386
Totals for Group	**79,372,470**	**81,798,280**	**89,814,164**	**104,811,304**	**108,932,093**
Wood, Wood Products, and Paper—					
Dutiable	11,570,874	12,938,798	13,948,545	15,653,143	17,541,770
Free	7,787,113	8,260,889	9,323,086	13,274,577	16,679,411
Totals for Group	**19,357,987**	**21,199,687**	**23,271,631**	**28,927,720**	**34,221,181**
Iron and Its Products—					
Dutiable	49,509,704	71,529,016	79,531,376	105,174,728	136,878,679
Free	19,616,937	28,527,129	34,722,339	45,064,411	72,358,032
Totals for Group	**69,126,641**	**100,056,145**	**114,253,715**	**150,239,139**	**209,236,711**
Non-Ferrous Metals and Their Products—					
Dutiable	12,940,794	17,171,874	19,684,599	24,759,332	31,013,938
Free	7,230,206	11,324,755	14,001,320	12,278,622	16,050,034
Totals for Group	**20,171,000**	**28,496,629**	**33,685,919**	**37,037,954**	**47,063,972**
Non-Metallic Minerals and Their Products (except chemicals)—					
Dutiable	38,522,548	46,902,200	45,951,658	50,015,913	56,858,200
Free	44,874,213	55,525,837	59,469,578	66,932,348	79,804,302
Totals for Group	**83,396,761**	**102,428,037**	**105,421,236**	**116,948,261**	**136,662,502**
Chemicals and Allied Products—					
Dutiable	15,314,270	16,264,427	16,568,065	18,342,091	19,196,811
Free	10,269,405	12,607,626	13,351,856	14,763,357	17,693,338
Totals for Group	**25,583,675**	**28,872,053**	**29,919,921**	**33,105,448**	**36,890,149**
Miscellaneous Commodities—					
Dutiable	12,981,897	15,628,827	16,717,559	20,910,521	24,411,546
Free	13,137,507	14,575,423	14,978,166	20,631,778	24,916,563
Totals for Group	**26,119,404**	**30,204,250**	**31,695,725**	**41,542,299**	**49,328,109**
Total Imports—					
Dutiable	250,476,412	301,245,922	309,933,096	369,933,634	434,165,772
Free	183,322,213	221,185,231	252,785,967	301,941,932	364,904,146
Totals, Imports	**433,798,625**	**522,431,153**	**562,719,063**	**671,875,566**	**799,069,918**
Totals, Duties Collected[1]	**73,154,472**	**84,627,473**	**82,784,317**	**92,282,059**	**103,719,952**

---

[1] Includes the following additional and special duties which cannot be apportioned by groups of commodities: 1934, $2,342,895; 1935, $1,903,854; 1936, $2,058,956; 1937, $2,096,414; and 1938, $1,978,109.

14.—Imports (Dutiable and Free) and Exports of Canadian and Foreign Produce, by Main Classes, and Totals of Duties Collected during the fiscal years ended Mar. 31, 1934-38—concluded.

Class.	1934.	1935.	1936.	1937.	1938.
EXPORTS.	$	$	$	$	$
Agricultural and Vegetable Products (except chemicals, fibres, and wood)—					
Canadian produce	205,804,526	226,233,097	242,861,877	346,450,628	235,324,412
Foreign produce	760,655	838,613	1,192,224	3,146,134	3,435,730
Totals for Group	**206,565,181**	**227,071,710**	**244,054,101**	**349,596,762**	**238,760,142**
Animals and Animal Products (except chemicals and fibres)—					
Canadian produce	75,151,480	86,848,144	100,932,110	133,940,776	136,112,957
Foreign produce	492,675	401,058	604,061	945,469	973,479
Totals for Group	**75,644,155**	**87,249,202**	**101,536,171**	**134,886,245**	**137,086,436**
Fibres, Textiles, and Textile Products—					
Canadian produce	7,828,684	7,523,144	10,273,697	12,830,212	14,225,183
Foreign produce	383,167	414,579	788,925	1,409,299	1,134,151
Totals for Group	**8,211,851**	**7,937,723**	**11,062,622**	**14,239,511**	**15,359,334**
Wood, Wood Products, and Paper—					
Canadian produce	143,142,398	160,932,709	181,831,743	223,918,476	253,434,860
Foreign produce	191,127	288,761	242,904	280,848	394,607
Totals for Group	**143,333,525**	**161,221,470**	**182,074,647**	**224,199,324**	**253,829,467**
Iron and Its Products—					
Canadian produce	26,641,482	40,736,038	52,368,057	53,173,175	69,744,157
Foreign produce	1,702,969	2,042,729	2,465,602	1,849,499	2,315,199
Totals for Group	**28,344,451**	**42,778,767**	**54,833,659**	**55,022,674**	**72,059,356**
Non-Ferrous Metals and Their Products—					
Canadian produce	168,375,134	191,345,386	212,547,372	230,152,314	292,452,554
Foreign produce	329,235	982,250	5,003,508	1,811,984	1,081,727
Totals for Group	**168,704,369**	**192,327,636**	**217,550,880**	**231,964,298**	**293,534,281**
Non-Metallic Minerals and Their Products (except chemicals)—					
Canadian produce	14,808,912	15,654,323	19,083,643	26,081,028	29,342,764
Foreign produce	468,557	302,786	711,448	954,319	1,540,972
Totals for Group	**15,277,469**	**15,957,109**	**19,795,091**	**27,035,347**	**30,883,736**
Chemicals and Allied Products—					
Canadian produce	13,843,829	15,270,064	16,018,391	19,237,697	20,926,267
Foreign produce	279,267	187,378	414,842	297,169	389,070
Totals for Group	**14,123,096**	**15,457,442**	**16,433,233**	**19,534,866**	**21,315,337**
Miscellaneous Commodities—					
Canadian produce	10,357,626	12,083,020	13,113,527	15,397,600	18,665,455
Foreign produce	1,703,672	2,200,809	2,018,145	2,367,593	3,327,660
Totals for Group	**12,061,298**	**14,283,829**	**15,131,672**	**17,765,193**	**21,993,115**
Total Exports—					
Canadian produce	665,954,071	756,625,925	849,030,417	1,061,181,906	1,070,228,609
Foreign produce	6,311,324	7,658,963	13,441,659	13,062,314	14,592,595
Totals, Exports	**672,265,395**	**764,284,888**	**862,472,076**	**1,074,244,220**	**1,084,821,204**
Total Trade—					
Imports, merchandise	433,798,625	522,431,153	562,719,063	671,875,566	799,069,918
Exports, merchandise	672,265,395	764,284,888	862,472,076	1,074,244,220	1,084,821,204
Totals, External Trade	**1,106,064,020**	**1,286,716,041**	**1,425,191,139**	**1,746,119,786**	**1,883,891,122**

15.—External Trade of Canada, by Main Groups and Degree of Manufacture, According to Origin, fiscal year ended Mar. 31, 1938.

Origin.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Farm Origin—						
1.—Canadian Farm Products—[1]						
Field Crops—						
Raw materials	830,200	17,915,207	33,048,496	112,082,855	9,374,627	153,981,305
Partly manufactured	8,108	421,857	666,890	92,557	2,209,602	2,715,682
Fully or chiefly manufactured	9,309,163	4,124,353	16,150,642	27,672,890	21,076,635	61,185,080
Totals, Canadian Field Crops	10,147,471	22,461,417	49,866,028	139,848,302	32,660,864	217,882,067
Animal Husbandry—						
Raw materials	2,217,619	3,835,075	15,861,459	5,246,073	21,769,103	29,859,600
Partly manufactured	7,733,024	1,783,001	13,195,863	4,095,259	992,054	5,479,358
Fully or chiefly manufactured	19,931,201	2,220,123	27,229,716	53,218,015	1,854,693	59,225,122
Totals, Canadian Animal Husbandry	29,881,844	7,838,199	56,287,038	62,559,347	24,615,850	94,564,080
All Canadian Farm Products—						
Raw materials	3,047,819	21,750,282	48,909,955	117,328,928	31,143,730	183,840,905
Partly manufactured	7,741,132	2,204,858	13,862,753	4,187,816	3,201,656	8,195,040
Fully or chiefly manufactured	29,240,364	6,344,476	43,380,358	80,890,905	22,931,328	120,410,202
Totals, Canadian Farm Products	**40,029,315**	**30,299,616**	**106,153,066**	**202,407,649**	**57,276,714**	**312,446,147**
2.—Foreign Farm Products—[1]						
Field Crops—						
Raw materials	781,370	32,626,897	58,513,758	Nil	47,549	48,304
Partly manufactured	4,786,331	2,232,288	31,659,179	11,721	267,171	307,973
Fully or chiefly manufactured	22,974,432	13,561,332	61,905,438	6,867,442	875,343	21,652,572
Totals, Foreign Field Crops	28,542,133	48,420,517	152,078,375	6,879,163	1,190,063	22,008,849
Animal Husbandry—						
Raw materials	478,360	4,764,909	5,553,479	Nil	Nil	Nil
Partly manufactured	235,550	140,028	423,655	"	"	"
Fully or chiefly manufactured	666,919	1,112,609	3,076,675	524,849	6,422	3.251,085
Totals, Foreign Animal Husbandry	1,380,829	6,017,546	9,053,809	524,849	6,422	3,251,085
All Foreign Farm Products—						
Raw materials	1,259,730	37,391,806	64,067,237	Nil	47,549	48,304
Partly manufactured	5,021,881	2,372,316	32,082,834	11,721	267,171	307,973
Fully or chiefly manufactured	23,641,351	14,673,941	64,982,113	7,392,291	881,765	24,903,657
Totals, Foreign Farm Products	**29,922,962**	**54,438,063**	**161,132,184**	**7,404,012**	**1,196,485**	**25,259,934**
3.—All Farm Products—						
All Field Crops—						
Raw materials	1,611,570	50,542,104	91,562,254	112,082,855	9,422,176	154,029,609
Partly manufactured	4,794,439	2,654,145	32,326,069	104,278	2,476,773	3,023,655
Fully or chiefly manufactured	32,283,595	17,685,685	78,056,080	34,540,332	21,951,978	82,837,652
Totals, All Field Crops	38,689,604	70,881,934	201,944,403	146,727,465	33,850,927	239,890,916

---

[1] In this classification the expression "Canadian Farm Products" refers, in the case of exports, to commodities actually produced, in their original state, on Canadian farms. In the case of imports, it covers all commodities of which the basic raw materials are such as Canadian farms produce. "Foreign Farm Products" covers, in both imports and exports, materials or commodities such as Canada does not produce in their original forms, e.g., cane sugar, tea, rubber, cotton, silk, etc.

15.—External Trade of Canada, by Main Groups and Degree of Manufacture, According to Origin, fiscal year ended Mar. 31, 1938—concluded.

Origin.	Imports for Consumption.			Exports of Canadian Produce		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Farm Origin—concluded.						
3.—All Farm Products—concluded.						
All Animal Husbandry—						
Raw materials	2,695,979	8,599,984	21,414,938	5,246,073	21,769,103	29,859,600
Partly manufactured	7,968,574	1,923,029	13,619,518	4,095,259	992,054	5,479,358
Fully or chiefly manufactured	20,598,120	3,332,732	30,306,391	53,742,864	1,861,115	62,476,207
Totals, All Animal Husbandry	31,262,673	13,855,745	65,340,847	63,084,196	24,622,272	97,815,165
All Farm Products—						
Raw materials	4,307,549	59,142,088	112,977,192	117,328,928	31,191,279	183,889,209
Partly manufactured	12,763,013	4,577,174	45,945,587	4,199,537	3,468,827	8,503,013
Fully or chiefly manufactured	52,881,715	21,018,417	108,362,471	88,283,196	23,813,093	145,313,859
Totals, Farm Origin	**69,952,277**	**84,737,679**	**267,285,250**	**209,811,661**	**58,473,199**	**337,706,081**
Wild Life Origin—						
Raw materials	544,670	2,087,603	2,898,865	8,847,616	4,560,766	14,112,521
Partly manufactured	119,964	621,011	1,243,275	433,880	42,614	650,862
Fully or chiefly manufactured	112,160	179,795	377,978	9,481	156,766	181,300
Totals, Wild Life Origin	**776,794**	**2,888,409**	**4,520,118**	**9,290,977**	**4,760,146**	**14,944,683**
Marine Origin—						
Raw materials	14,603	422,392	959,155	1,145,805	11,008,528	12,477,334
Partly manufactured	1,001	40	1,041	Nil	Nil	Nil
Fully or chiefly manufactured	234,886	460,279	1,931,264	5,477,653	3,002,314	16,059,358
Totals, Marine Origin	**250,490**	**882,711**	**2,891,460**	**6,623,458**	**14,010,842**	**28,536,692**
Forest Origin—						
Raw materials	3,826	613,381	721,860	347,858	15,857,069	19,630,965
Partly manufactured	26,128	7,117,460	7,259,048	31,518,480	44,137,627	90,386,072
Fully or chiefly manufactured	3,965,830	22,445,081	28,995,054	13,577,585	109,000,124	143,526,869
Totals, Forest Origin	**3,995,784**	**30,175,922**	**36,975,962**	**45,443,923**	**168,994,820**	**253,543,906**
Mineral Origin—						
Raw materials	6,669,283	81,635,627	104,719,593	9,923,633	28,005,565	54,616,809
Partly manufactured	2,114,857	11,157,559	15,958,174	97,460,445	121,965,182	254,934,819
Fully or chiefly manufactured	47,121,921	226,888,809	293,592,209	21,995,615	14,109,015	94,773,856
Totals, Mineral Origin	**55,906,061**	**319,681,995**	**414,269,976**	**129,379,693**	**164,079,762**	**404,325,484**
Mixed Origin—						
Raw materials	31,152	149,985	197,619	Nil	Nil	Nil
Partly manufactured	516,636	1,911,052	3,029,485	140,814	477,751	692,544
Fully or chiefly manufactured	13,579,577	46,851,754	69,900,048	8,721,156	12,334,571	30,479,219
Totals, Mixed Origin	**14,127,365**	**48,912,791**	**73,127,152**	**8,861,970**	**12,812,322**	**31,171,763**
Recapitulation—						
Raw materials	11,571,083	144,051,076	222,474,284	137,593,840	90,623,207	284,726,838
Partly manufactured	15,541,599	25,384,296	73,436,610	133,753,156	170,092,001	355,167,310
Fully or chiefly manufactured	117,896,089	317,844,135	503,159,024	138,064,686	162,415,883	430,334,461
Grand Totals	**145,008,771**	**487,279,507**	**799,069,918**	**409,411,682**	**423,131,091**	**1,070,228,609**

16.—Summary of the External Trade of Canada, by Main Groups, Compiled on a Classification According to Purpose, fiscal year ended Mar. 31, 1938.

Note.—An analysis of external trade upon the purpose classification in greater detail for the fiscal year ended Mar. 31, 1938, will be found at pp. 838-840 of the Annual Report on the Trade of Canada, 1938, published by the Dominion Bureau of Statistics. Grand totals correspond with those of Table **15**, pp. 546-547.

Group and Purpose.	Imports for Consumption.			Exports of Canadian Produce.		
	United Kingdom.	United States.	Total.	United Kingdom.	United States.	Total.
	$	$	$	$	$	$
Foods, Beverages and Smokers Supplies (ready for consumption or not)	**16,303,758**	**32,948,030**	**113,372,299**	**189,217,984**	**52,825,733**	**295,877,931**
Foods[1]	*6,638,710*	*31,629,215*	*89,266,264*	*188,802,777*	*34,121,025*	*276,411,287*
Animals for food	110	2,484	2,594	1,587,553	12,430,145	14,230,019
Breadstuffs	429,342	7,157,537	17,215,513	112,718,786	2,003,930	153,197,451
Cocoa and chocolate	541,052	524,823	2,148,461	Nil	Nil	Nil
Fish	97,683	579,268	1,973,546	6,074,563	12,654,802	26,287,804
Fruits	325,944	15,041,096	24,137,054	9,105,553	607,336	10,600,060
Meats	145,217	410,294	1,260,157	36,159,469	3,271,705	41,362,775
Lard, substitutes, etc	232	7,665	32,155	3,067,398	159	3,133,608
Milk and its products	245,291	99,802	1,714,469	14,740,272	846,646	17,687,484
Nuts	110,681	819,584	3,696,010	1,355	107	1,944
Oils	2,952,297	94,158	5,646,133	Nil	Nil	Nil
Sugar and its products	634,645	543,419	20,663,829	141,515	786,885	1,396,043
Vegetables	233,582	4,789,112	6,253,132	3,596,222	973,024	5,661,345
Beverages and infusions[1]	*8,836,246*	*1,156,895*	*22,444,774*	*414,671*	*18,699,992*	*19,437,823*
Beverages, alcoholic	5,343,996	74,230	7,429,632	122,816	18,637,257	19,015,209
Infusions	3,468,238	510,837	14,181,203	48,561	10,988	84,707
Smokers supplies	828,802	161,920	1,661,261	536	4,716	28,821
Personal and Household Utilities (finished goods)	**20,396,844**	**40,239,969**	**73,471,141**	**11,988,266**	**3,282,048**	**31,104,072**
Books, stationery, etc	3,176,071	15,292,316	19,574,245	835,020	540,929	2,143,416
Clothing	5,396,684	6,492,386	15,165,719	6,527,086	543,615	14,312,506
Household utilities	9,796,956	11,594,280	25,065,353	2,417,004	109,797	9,039,814
Jewellery, timepieces, etc.	398,148	1,847,385	4,994,695	156,614	6,611	604,662
Personal utilities	837,943	1,497,459	3,297,588	2,000	426	96,423
Recreation equipment, etc.	791,042	3,516,143	5,373,541	2,050,542	2,080,670	4,907,251
Electric Energy	**Nil**	**72,863**	**72,863**	**Nil**	**4,078,032**	**4,080,785**
Electrical Equipment	**2,112,213**	**12,751,673**	**15,860,480**	**1,056,777**	**1,279,504**	**5,970,102**
Producers Equipment[1]	**16,614,830**	**120,491,835**	**144,771,832**	**8,155,569**	**15,344,184**	**39,888,199**
Abrasives	116,542	5,899,022	6,202,880	1,511,444	4,869,292	6,555,856
Containers, packing, etc	1,587,604	4,590,225	7,837,124	157,903	1,302,942	4,320,013
Farm equipment[1]	*1,179,217*	*19,033,575*	*21,419,654*	*1,542,512*	*6,775,670*	*14,144,832*
Agricultural implements	646,410	18,232,558	19,305,069	1,412,904	3,766,532	10,730,752
Animals (except for food)	228,830	463,992	766,518	73,947	2,649,352	2,906,693
Industrial equipment[1]	*7,102,850*	*47,092,749*	*56,590,400*	*4,752,444*	*285,330*	*10,585,414*
Fisheries equipment	1,344,025	429,597	1,992,926	Nil	4,924	12,264
Metal-working machinery	306,492	7,395,546	7,816,516	46,404	528	122,076
Mining and metallurgical	723,034	6,424,966	7,193,778	Nil	Nil	Nil
Office and business	151,805	2,967,061	3,171,489	1,698,957	2,793	2,437,747
Printing	377,853	3,978,737	4,616,518	1,676	12,506	16,749
Textile and cordage	1,234,800	3,607,592	5,156,379	Nil	Nil	Nil
Tools, *n.o.p*	484,512	1,658,606	2,625,960	477,931	17,872	1,561,001
Fuel	5,871,732	37,253,988	44,941,186	62,318	1,985,324	3,085,773
Lubricating oils and greases	46,004	3,730,422	3,790,712	21,958	97,273	264,864
Producers Materials (except unmftd. foods)	**78,954,523**	**182,459,157**	**337,231,296**	**186,857,926**	**257,199,099**	**549,603,031**
Construction materials	3,670,804	14,332,133	20,147,042	29,651,990	22,490,307	64,026,306
Farm materials	1,294,242	4,813,511	10,122,329	8,993,555	13,941,335	27,565,866
Manufacturers materials[1]	*73,989,477*	*163,313,513*	*306,961,925*	*148,212,381*	*220,767,457*	*458,010,859*
Textiles, clothing, etc	38,657,938	30,324,696	86,837,028	602,467	402,411	3,008,720
Dyeing and tanning	704,251	2,311,465	5,232,060	Nil	7,031	7,031
Fur and leather goods	3,261,471	6,499,431	14,710,914	13,605,502	7,264,131	22,841,689
Metals, raw or refined	1,422,797	9,529,420	15,591,900	68,300,253	25,290,510	124,479,922
For furniture and wooden wares	37,313	2,164,201	2,345,749	1,556,861	273,883	3,305,015
Pulp, paper, etc	397,455	6,030,335	6,575,889	13,371,629	142,343,875	178,603,358
Rubber	128,827	3,138,678	15,935,534	859	121,097	135,993
Transportation	**2,959,236**	**55,514,606**	**58,595,016**	**2,156,305**	**434,361**	**39,135,656**
Vehicles	2,898,307	54,709,651	57,702,443	2,155,799	298,689	38,560,216
Vessels	60,929	804,955	892,573	506	135,672	575,440
Medical Supplies	**1,455,473**	**3,609,322**	**6,137,150**	**801,502**	**177,796**	**1,759,324**
Arms, Explosives, and War Stores	**323,439**	**771,288**	**1,155,275**	**242,852**	**18,073**	**571,282**
Goods for Exhibition	**89,909**	**1,641,714**	**1,910,434**	**10,000**	**167,033**	**177,033**
Non-Monetary Gold	**Nil**	**Nil**	**Nil**	**2,511,436**	**83,692,300**	**86,203,736**

---

[1] Includes minor items not shown.

17.—Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at Certain Ports and by Provinces, fiscal years ended Mar. 31, 1937 and 1938.

Note.—The values of imports and exports at the several ports of entry given in the following table indicate that merchandise of the value stated was entered inwards, or passed outwards, at the ports mentioned, but it is not to be inferred that the imports were all for consumption at such ports or that the exports originated there.

Province and Port.	1937.			1938.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	$	$	$	$	$	$
P.E. Island.						
Totals, P. E. Island	**1,262,912**	**758,929**	**68,959**	**564,055**	**903,035**	**73,321**
Nova Scotia.						
Halifax	57,859,279	16,220,286	1,377,062	61,491,155	17,674,057	1,553,089
Liverpool	3,496,938	158,997	7,282	3,820,739	181,424	23,578
North Sydney	2,335,044	334,226	11,532	2,945,063	350,011	11,965
Sydney	6,182,335	2,157,218	118,822	6,789,641	3,217,204	189,999
Yarmouth	2,052,254	726,635	24,267	2,015,760	927,232	28,562
Totals, Nova Scotia[1]	**77,580,182**	**21,658,469**	**1,733,498**	**84,467,252**	**24,770,103**	**2,023,155**
New Brunswick.						
Campbellton	4,980,225	535,958	35,386	5,857,096	572,346	22,706
Fredericton	Nil	986,488	336,673	Nil	1,142,319	455,478
McAdam Junction	4,001,752	89,738	9,442	3,418,842	102,114	3,539
Moncton	527,899	1,008,469	166,338	675,458	1,150,429	177,708
Saint John	61,757,499	11,577,373	1,232,406	91,130,198	13,052,642	1,239,839
Woodstock	6,371,295	327,878	36,386	7,110,124	631,281	83,627
Totals, New Brunswick[1]	**79,818,915**	**16,094,784**	**1,975,338**	**111,487,396**	**18,672,321**	**2,161,476**
Quebec.						
Chicoutimi	13,334,960	2,143,746	66,780	14,171,910	3,418,559	243,340
Coaticook	2,604,123	252,611	20,841	2,671,176	253,594	25,785
Drummondville	40,686	2,741,962	132,961	68,135	2,415,509	156,146
Granby	5,817	1,028,791	296,754	6,111	1,272,305	311,422
Hull	Nil	1,695,537	103,632	Nil	1,933,860	142,888
Huntingdon (Athelstan)	10,745,145	684,291	94,028	9,000,369	798,093	88,613
Montreal	209,550,018	157,326,945	21,956,298	258,413,995	188,228,654	24,959,600
Quebec	15,081,068	9,146,332	863,861	12,679,358	10,356,475	1,339,830
Rock Island	3,440,529	1,230,973	50,908	3,835,962	1,523,590	66,171
St. Armand	15,907,979	297,802	10,579	16,723,660	413,140	11,594
St. Hyacinthe	5,436	3,182,755	101,583	5,706	2,893,776	109,913
St. Johns	114,743,670	5,723,229	691,142	123,416,435	7,517,103	826,753
Shawinigan Falls	Nil	2,596,067	113,971	Nil	3,215,996	166,420
Sherbrooke	367,833	4,443,394	397,117	333,721	6,072,422	617,402
Sorel	22,172,660	940,806	41,330	8,436,903	2,247,811	75,799
Sutton	7,475,416	162,772	23,196	6,502,891	228,557	31,387
Three Rivers	12,192,118	5,848,813	196,490	11,671,460	6,502,905	342,986
Totals, Quebec[1]	**430,043,015**	**202,027,078**	**25,219,713**	**471,160,678**	**242,115,320**	**29,642,836**
Ontario.						
Amherstburg	67,402	790,705	189,375	67,692	1,031,511	248,575
Belleville	Nil	1,199,393	225,604	585	1,179,879	233,869
Brantford	9,745	4,183,538	349,825	8,531	4,543,340	423,322
Brockville	134,506	911,937	117,781	156,521	938,322	134,710
Chatham	45,870	2,946,404	658,175	49,466	3,618,159	713,142
Cobourg	869,272	1,125,222	174,061	1,036,227	1,450,974	284,261
Cornwall	1,240,351	2,489,282	108,037	973,316	3,550,165	216,236
Fort Erie (Bridgeburg)	50,244,502	4,682,091	535,807	52,533,557	6,533,310	718,146
Fort Frances	13,135,746	1,241,173	246,519	14,494,072	1,565,468	272,086
Fort William	31,900,670	2,383,845	641,141	10,055,457	3,428,123	896,370
Galt	1,867	4,353,465	293,708	1,456	5,120,445	334,507
Guelph	30,817	3,143,004	184,829	41,828	3,340,126	215,894
Hamilton	560,791	27,431,359	3,725,613	315,265	34,347,928	4,197,591
Kingston	328,018	1,116,295	116,001	136,393	1,579,785	195,212
Kitchener	6,441	6,106,243	572,418	8,148	7,052,203	622,804

---

[1] Totals include other smaller ports.

17.—Values of Total Exports, Imports Entered for Consumption, and Duties Collected Thereon, at Certain Ports and by Provinces, fiscal years ended Mar. 31, 1937 and 1938—concluded.

Province and Port.	1937.			1938.		
	Total Exports.	Imports for Consumption.	Duty Collected.	Total Exports.	Imports for Consumption.	Duty Collected.
	$	$	$	$	$	$
Ontario—concluded.						
London	112,107	5,917,457	926,727	113,758	6,285,435	914,918
Niagara Falls	48,619,499	9,129,544	1,359,952	56,631,234	11,857,859	1,750,061
North Bay	Nil	2,731,738	318,622	Nil	3,312,194	395,827
Oshawa	9,798	8,876,036	1,105,702	16,270	8,106,154	830,083
Ottawa	1,119	6,402,840	940,096	730,868	8,014,230	1,048,732
Parry Sound	878,971	956,806	394,496	1,029,724	1,264,306	410,785
Peterborough	481	4,108,298	477,041	1,563	5,980,174	952.080
Port Arthur	61,159,382	1,183,398	183,621	15,234,994	1,237,261	232,568
Prescott	4,294,606	1,037,415	353,526	4,975,244	1,385,056	441,936
St. Catharines	3,987,976	5,206,359	769,942	4,429,385	6,424,180	958,760
St. Thomas	2,250	1,161,213	203,578	582	1,474,248	306,799
Sarnia	25,969,753	13,975,375	759,238	26,612,908	17,901,235	1,101,586
Sault Ste. Marie	6,916,286	2,906,291	760,816	6,109,039	6,191,340	1,017,571
Stratford	Nil	1,349,591	156,784	Nil	1,489,169	166,693
Sudbury	"	3,375,276	215,047	"	4,005,327	218,550
Tilsonburg	6,288	823,782	302,992	13,496	999,335	325,859
Toronto	1,634,012	131,066,460	20,683,279	2,010,781	142,798,162	21,589,425
Welland	2,348,384	8,705,238	576,332	707,245	12,232.106	775,496
Windsor	41,599,200	46,113,093	8,461,367	42,762,333	49.066,870	8,116.471
Woodstock	164	1,518,607	121,757	493	1,850,468	120,667
Totals, Ontario[1]	**296,382,743**	**330,492,056**	**48,321,773**	**241,809,883**	**393,644,821**	**54,014,051**
Manitoba.						
Brandon	103,714	446,321	59,863	123,773	1,029.834	64,877
Emerson	13,407,309	1,634,919	184,467	13,149,824	2,192,868	287,367
Winnipeg	4,345,475	19,529,766	3,516,356	824,978	22,203,887	3,522,799
Totals, Manitoba[1]	**18,100,670**	**21,715,012**	**3,769,390**	**14,144,727**	**25,709,066**	**3,930,050**
Saskatchewan.						
Moose Jaw	27,740	1,297,642	114,139	68,807	1,667,203	109,135
North Portal	7,506,971	260,659	37,790	7,374,316	587,740	63,153
Regina	141,885	5,506,729	664,249	106,885	5,129,696	599,243
Saskatoon	Nil	1,879,307	208,542	Nil	2,188,978	204,543
Totals, Saskatchewan[1]	**7,676,596**	**9,133,504**	**1,053,462**	**7,550,008**	**9,844,070**	**1,001,853**
Alberta.						
Calgary	Nil	5,226,272	684,939	Nil	8,397,584	908,109
Edmonton	68,241	3,393,792	840,554	"	4,531,749	811,312
Lethbridge	487,179	2,035,606	117,438	115,338	1,659,278	113,911
Totals, Alberta[1]	**1,498,144**	**12,797,422**	**1,701,552**	**2,051,136**	**17,077,444**	**1,980,254**
British Columbia.						
Nanaimo	8,990,338	146,337	21,157	9,466,131	326,475	23,201
Nelson	290,792	358,100	45,496	272,493	387,099	53,095
New Westminster	43,753,720	2,539,358	273,883	48,452,368	3,047,103	317,486
Prince Rupert	4,377,745	689,121	114,781	4,854,706	703,604	99,696
Vancouver	95,466,907	47,737,883	6,811,526	76,975,522	54,594,194	7,041,115
Victoria	5,290,838	3,785,316	833,800	6,296,460	4,299,642	910,219
Totals, British Columbia[1]	**161,288,981**	**56,816,055**	**8,241,013**	**149,460,817**	**65,777,205**	**8,666,039**
Yukon.						
Totals, Yukon	**592,062**	**365,886**	**55,952**	**2,125,252**	**536,355**	**81,087**
Prepaid postal parcels, duty received through P.O. Department	–	16,371	3,551	–	20,178	3,753
Customs duty stamps	–	–	137,859	–	–	142,076
Grand Totals	**1,074,244,220**	**671,875,566**	**92,282,059**	**1,084,821,204**	**799,069,918**	**103,719,951**

---

[1] Totals include other smaller ports.

18.—Imports of Canada, by Values Entered for Consumption from British Empire and Foreign Countries, Dutiable and Free, under the General, Preferential, and Treaty Rate Tariffs, fiscal year ended Mar. 31, 1938.

Country.	Dutiable Under—			Free Under—			Total Imports.
	General Tariff.	Preferential Tariff.	Treaty Tariff.	General Tariff.	Preferential Tariff.	Treaty Tariff.	
	$	$	$	$	$	$	$
British Empire.							
United Kingdom	1,070,501	65,271,819	956,465	15,505,384	62,204,602	-	145,008,771
Ireland	168	18.077	66	1,774	29,809	-	49,894
Africa—British East	13,411	763,935	3,465	479,307	2,027,592	-	3,287,710
British South	2,011	270,379	137,573	1,126,264	6,858,192	-	8,394,419
British West	1,205	6	358,778	777,705	442,501	-	1,580,245
Southern Rhodesia	1,279	458	540	31,261	459,571	-	493,109
Australia	11,944	3,252,477	965,204	1,206,285	6,735,161	-	12,171,071
British East Indies—							
British India	50,015	4,637,028	5,159	954,694	3,758,402	-	9,405,298
Ceylon	39,601	2,343,919	583	1,748,913	2,016,499	-	6,149,515
Straits Settlements	135	663.201	6,211	12,613,860	2,303,075	-	15,586,482
British Guiana	262	4,567,269	3,387	916,304	70,307	-	5,557,529
British West Indies—							
Barbados	2,759	1,569,802	981	5,819	1,563,847	-	3,143,208
Jamaica	2,365	2,743,967	1,909	35,628	2,884,239	-	5,668,108
Trinidad and Tobago	3,495	811,790	23,045	5,365	653,778	-	1,497,473
Other	1,259	697,186	2,780	74,359	748,092	-	1,523,676
Fiji	921	2,553,534	Nil	666	23,150	-	2,578,271
Hong Kong	560,393	Nil	26,580	184,317	Nil	-	771,290
Newfoundland	2,729	6,516	2,034	2,568,838	16,172	-	2,596,289
New Zealand	4,631	70,453	781,325	1,501,634	5,039,229	-	7,397,272
Totals, British Empire[1]	**1,778,481**	**90,296,324**	**3,313,053**	**39,830,436**	**97,987,122**	-	**233,205,416**
Foreign Countries.							
Argentina	2,195,520	-	692,824	2,316,773	-	Nil	5,205,117
Belgium	1,948,301	-	2,807,788	2,700,853	-	5,110	7,462,052
China	2,927,000	-	Nil	414,243	-	Nil	3,341,243
Colombia	10,826	-	676,773	3,929,751	-	"	4,617,350
Czechoslovakia	335,391	-	2,587,232	161,583	-	3,642	3,087,848
Denmark	39,881	-	69,252	57,029	-	30	166,192
France	667,951	-	4,484,088	1,189,502	-	147,760	6,489,301
Germany	3,606,484	-	5,281,784	2,365,562	-	143,661	11,397,491
Italy	461,960	-	2,023,994	867,579	-	4,899	3,358,432
Japan	1,301,260	-	3,277,315	1,115,878	-	87,963	5,782,416
Netherlands	1,213,745	-	1,259,887	1,065,465	-	8,038	3,547,135
Norway	44,946	-	510,605	161,146	-	Nil	716,697
Peru	6,316	-	Nil	4,534,663	-	"	4,540,979
Spain	78,064	-	514,955	268,688	-	"	861,707
Sweden	740,004	-	1,468,989	256,808	-	10,165	2,475,966
Switzerland	1,556,773	-	1,579,071	663,045	-	2,877	3,801,766
United States	84,687,068	-	204,058,908	179,566,862	-	18,966,669	487,279,507
Totals, Foreign Countries[1]	**105,199,616**	-	**233,578,298**	**207,686,987**	-	**19,399,601**	**565,864,502**
Totals, Imports Entered for Consumption	**106,978,097**	**90,296,324**	**236,891,351**	**247,517,423**	**97,987,122**	**19,399,601**	**799,069,918**

[1] Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1934-38.

Country.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
British Empire.					
United Kingdom	105,100,764	111,682,490	117,874,822	129,507,885	145,008,771
Ireland	31,761	34,922	82,866	45,467	49,894
Aden	8,021	6,837	2,563	490	9,075
Africa—British East	928,543	1,330,089	3,225,242	2,828,726	3,287,710
British South	3,641,261	3,296,780	4,769,003	1,459,229	8,394,419
British West	507,159	587,069	1,002,774	1,498,135	1,580,245
Southern Rhodesia	936	163,431	Nil	1,082.098	493,109
Bermuda	163,066	147,706	145,229	156,635	72,231
British East Indies—British India	5,941,863	6,414,944	7,458,125	8.325,955	9,405,298
Ceylon	1,409,959	2,092,512	2,917,879	3,962,468	6,149,515
Straits Settlements	1,001,878	2,970,415	7,198,269	10,540,669	15,586,482
Other	7,730	23,938	37,715	62,655	60,168
British Guiana	1,389,183	2,449,442	4,757,937	5,051,357	5,557,529
British Honduras	144,820	48.276	131,360	51,176	43,117
British Sudan	5,655	12,919	28,905	19,935	28,545
British West Indies—Barbados	3,126,857	4,861,463	3,430,007	3,710.534	3,143,208
Jamaica	2,640,286	4,304,770	4,313,329	5,172,905	5,668,108
Trinidad and Tobago	1,986,716	1,357,030	2,593,296	2,786,898	1,497,473
Other	1,357,089	1,381,744	1,818,095	1,792,705	1,523,676
Hong Kong	624,336	676.243	1,185,141	709,316	771,290
Newfoundland	630,070	1,588,973	2,019,282	2,162,223	2,596,289
Oceania—Australia	5,406,582	6,327,175	7,277,099	9,469,823	12,171,071
Fiji	1,647,324	1,799,959	1,770,435	2,394,641	2.578,271
New Zealand	2,575,158	2,534,678	3,622,398	5,376,866	7,397,272
Palestine	126,747	91,865	59,313	15,907	115,824
Totals, British Empire[1]	**140,403,886**	**156,186,471**	**177,721,310**	**198,165,842**	**233,205,416**
Foreign Countries.					
Argentina	2,049,563	2,790,923	3,744,062	11,724,269	5,205,117
Austria	216,557	280,986	331,482	389,067	444,480
Belgium	3,200,168	3,613,538	5,093,778	6,695,533	7,462,052
Bolivia	300	25	24,824	61,959	36,706
Brazil	626,586	835,546	900,877	906,062	857,045
Chile	8,323	67,860	59,169	51,913	68,848
China	2,330,559	2,345,570	3,717,181	4,275,235	3,341,243
Colombia	3,569,707	4,563,821	4,202,197	4,529,017	4,617,350
Costa Rica	35,774	47,921	60,978	62,209	64,367
Cuba	1,063,239	929,267	441,942	456,614	815,884
Czechoslovakia	1,403,472	2,310,315	1,969,644	2,364,982	3,087,848
Denmark	294,470	126,383	109,977	160,129	166,192
Greenland	183,259	Nil	Nil	230,235	555,818
Ecuador	15,715	20,765	75,418	49,482	34,590
Egypt	701,155	956,491	814,138	612.684	539,454
Estonia	11,558	22,293	26,127	23,876	28,001
Finland	42,088	36,315	48,374	55,126	98.624
France	6,898,411	6,443,695	6,717,668	6,454,161	6,489,301
French Africa	85,266	35,400	63,643	57,228	56,464
French East Indies	3,823	22,672	86,097	81,023	145,040
St. Pierre and Miquelon	191,039	291,579	42,786	14,281	25,758
Germany	9,922,704	10,014,434	9,907,685	11,683,528	11,397,491
Greece	49,405	39,938	48,019	67,188	56,512
Guatemala	6,330	5,210	16,131	29,696	62,341
Haiti	1,029	62,001	56,811	100,554	32,698
Honduras	24,990	53,711	96,056	19,931	71,314
Hungary	58,987	67,898	45,955	134,700	162,309
Iraq (Mesopotamia)	189,229	254,427	345,358	366,369	291.304
Italy	2,579,950	2,714,878	1,943,916	1,722,424	3,358,432
Japan	3,311,687	4,424,654	3,466,081	4,796,508	5,782,416
Latvia	12,060	4,664	10,243	12,120	5,875
Mexico	404,943	494,184	885,039	812,701	634,864
Morocco	14,786	23,237	14,867	24,902	16,845
Netherlands	3,241,669	4,343,945	4,258,497	4,252,461	3,547,135
Dutch East Indies	561,251	398,093	780,755	1,000,630	702,356
Dutch West Indies	867,486	Nil	273,019	207,955	81
Norway	531,287	713,577	862,644	713,955	716,697
Panama	9,674	91,799	42,460	9,735	4.313
Paraguay	15	13,307	52,082	56,937	65,058
Persia	130,752	129,119	156,245	156,838	148,382
Peru	3,579,726	3,430,387	4,171,236	5,271,737	4,540,979
Poland and Danzig	66,094	154,309	115,818	149,826	244,154
Portugal	129,197	199,846	154,213	270,206	362,341
Azores and Madeira	87,235	123,912	173,637	131,511	162,532

---

[1] Totals include other minor countries not specified.

19.—Values of Imports into Canada of Merchandise Entered for Consumption, from the British Empire and from Foreign Countries, fiscal years ended Mar. 31, 1934-38—concluded.

Country.	1934.	1935.	1936.	1937.	1938.
Foreign Countries—concluded.	$	$	$	$	$
Roumania	4,380	5,396	144,413	177,909	86,993
Russia. (U.S.S.R.)	104,760	265,039	279,441	128,721	627,419
Santo Domingo	189,006	1,314,939	126	Nil	32
Siam	22,595	52,040	158,272	158,240	53,987
Spain	1,128,755	1,374,755	1,428,984	1,151,253	861,707
Canary Islands	2,759	1,640	15,679	8,042	6,605
Sweden	1,138,443	1,704,892	1,757,668	1,836,415	2,475,966
Switzerland	2,808,308	2,335,297	2,573,076	2,701,255	3,801,766
Syria	2,704	4,559	4,093	2,804	12.574
Turkey	174,000	206,188	287,558	202,853	328,459
United States	238,187,681	303,639,972	319,479,594	393,720,662	487,279,507
Alaska	34,552	99,581	60,115	91,064	77,975
Hawaii	40,490	84,904	116,387	204,907	176,296
Philippines	365,472	496,105	592,465	787,617	662,255
Puerto Rico	1,194	1,296	22,791	24,484	5,692
Uruguay	19,908	166,975	206,663	63,377	176,427
Venezuela	396,533	834,848	1,270,437	1,006,627	2,603,604
Yugoslavia	33,005	93,817	87,966	90,172	50,965
Totals, Foreign Countries[1]	**293,394,739**	**366,244,682**	**384,997,753**	**473,709,724**	**565,864,502**
Grand Totals, Imports	**433,798,625**	**522,431,153**	**562,719,063**	**671,875,566**	**799,069,918**
Imports, by Continents.					
Europe—United Kingdom	105,100,764	111,682,490	117,874,822	129,507,885	145,008,771
Other Europe	34,000,977	37,026,683	38,183,295	41,420,040	45,762,372
North America	251,249,768	320,722,090	335,938,367	411,616,495	504,177,544
South America	11,655,811	15,207,035	19,465,458	28,772,737	23,764,215
Asia	16,212,647	20,610,821	28,456,913	35,446,077	43,566,205
Oceania	9,671,789	10,746,716	12,786,319	17,449,842	22,342,245
Africa	5,906,869	6,435,318	10,013,889	7,662,490	14,448,566

---

[1] Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1934-38.

Country.	1934.	1935.	1936.	1937.	1938.
British Empire.	$	$	$	$	$
United Kingdom	288,582,666	290,885,237	321,556,798	407,996,698	409,411,682
Ireland	3,514,785	4,120,524	3,039,231	3,799,710	5,153,371
Aden	34,753	40,879	119,667	77,396	134,927
Africa—British East	525,434	634,578	824,031	776,150	921,835
British South	7,286,544	12,127,704	13,502,138	15,573,639	16,168,871
British West	348,097	348,736	610,158	860,337	821,889
Southern Rhodesia	393,902	528,777	789,610	843,475	1,218,010
Bermuda	1,146,065	1,121,606	1,254,249	1,362,919	1,544,886
British East Indies—British India	3,743,360	4,118,175	3,133,869	3,221,062	4,348,171
Ceylon	109,411	237,085	223,086	136,558	237,788
Straits Settlements	681,682	1,493,894	1,314,927	1,938,514	2,941,655
British Guiana	800,578	927,198	1,098,866	1,264,852	1,465,880
British Honduras	256,869	209,759	252,938	226,793	286,946
British Sudan	52,402	1,662	70,045	90,559	324,530
British West Indies—Barbados	1,056,146	1,027,173	1,009,658	1,185,661	1,210,585
Jamaica	2,633,019	3,088,267	3,342,343	3,327,133	4,387,567
Trinidad and Tobago	1,997,460	2,206,914	2,313,583	3,053,985	3,806,179
Other	1,353,324	1,312,310	1,281,720	1,570,585	1,931,617
Gibraltar	9,935	15,375	7,311	15,215	5,811
Hong Kong	1,253,866	1,300,083	1,466,955	1,372,904	2,024,116
Malta, Cyprus and Gozo	188,871	207,134	416,210	331,513	432,664
Newfoundland	6,130,698	6,468,918	6,902,882	7,728,211	9,388,860
Oceania—Australia	12,138,869	18,081,847	23,974,094	26,953,810	32,422,489
Fiji	176,741	197,946	288,571	363,656	517,790
New Zealand	4,480,219	7,344,785	10,221,205	11,187,118	16,031,100
Palestine	99,621	135,523	274,156	315,441	249,876
Totals, British Empire[1]	**339,006,389**	**358,199,478**	**399,311,479**	**495,598,105**	**517,439,020**

---

[1] Totals include other minor countries not specified.

20.—Values of Exports of Canadian Produce from Canada to the British Empire and to Foreign Countries, fiscal years ended Mar. 31, 1934-38—concluded.

Country.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Foreign Countries.					
Argentina	2,793,801	4,014,974	3,981,453	3,727,088	7,419,568
Austria	31,268	25,810	44,808	40,849	38,649
Belgium	12,538,143	11,780,088	11,061,409	23,435,884	14,563,648
Belgian Congo	37,979	50,355	44,681	76,638	128.665
Bolivia	245,225	192,595	95,471	113,075	122,931
Brazil	1,758,380	2,769,578	3,711,283	3,872.899	4,830,149
Chile	276,533	557,303	852,292	956,935	919,389
China	5,395,970	4,461,465	4,555,726	4,899,488	3,354,228
Colombia	421,184	797,370	919,192	1,148,365	1,430,601
Costa Rica	71,219	66,322	83,640	99,786	97.978
Cuba	993,019	1,203,854	1,177,131	1,455,352	1,728,403
Czechoslovakia	71,910	39,015	55,278	193,978	1,272,053
Denmark	2,160,467	2,012,197	1,375,236	1,673,355	896,617
Ecuador	60,300	140,461	159,550	112,211	65,809
Egypt	179,578	297,984	440,085	409,044	365,932
Finland	328,539	345,367	722,258	637,581	578,451
France	11,907,478	9,842,294	7,648,440	11,717,806	7,609,382
French Africa	61,223	97,114	123,567	80,852	149,368
French Guiana	60,620	69,085	86,588	63,992	11,891
French Oceania	81,940	38,857	57,676	95,524	105,241
French West Indies	82,151	94,496	159,164	185,155	195,587
St. Pierre and Miquelon	4,346,925	350,799	362,255	338,033	297,523
Germany	10,588,450	4,474,158	4,559,594	7,828,525	12,254,405
Greece	138,313	5,341	429.992	3,082,065	552,689
Guatemala	122,975	154,157	89,488	102,173	91,278
Haiti	151,528	175,033	103,756	186,015	134,508
Honduras	115,228	105,641	130,590	153,140	156,501
Iraq (Mesopotamia)	30,578	129,231	115,907	14,356	36,704
Italy	3,543,315	3,630,630	2,376,533	4,656,016	2,272,152
Japan	13,802,760	16,935,869	14,844,137	21,629,690	26,639,885
Latvia	9,249	8,550	40,647	107,028	175,953
Mexico	1,680,766	1,885,330	1,719,634	2,854,330	3,484,305
Morocco	58,252	65,774	82,968	1,942,079	1,358,768
Netherlands	19,655,271	10,071,978	9,445,227	10,915,611	13,268,989
Dutch East Indies	412,180	564,273	660,472	690,009	709,010
Dutch Guiana	45,224	56,908	51,108	59,244	45,690
Dutch West Indies	76,487	124,743	141,727	176,941	198,811
Nicaragua	20,003	34,187	57,194	78,323	88,727
Norway	3,912,408	4,788,736	4,576,786	6,907,015	6,671,605
Panama	233,430	239,717	312,402	395,312	329.237
Persia	14,225	68,493	176,561	54,750	153,504
Peru	926,453	744,730	1,026,433	1,092,274	1,224.123
Poland and Danzig	71,343	402.067	511,929	557,196	738,804
Portugal	86,616	95,257	134,735	165,876	249,048
Portuguese Africa	952,519	1,372,743	1,715,147	1,769,576	1,982,850
Roumania	14,209	151,582	22,726	46,709	58,648
Russia (U.S.S.R.)	16,722	21,712	1,201	185,467	516,755
Salvador	26,061	59,090	60,195	111,060	41,069
Santo Domingo	178,017	261,275	131,304	166,716	298,506
Siam	4,326	6,853	7,294	15,576	27,154
Spain	1,822,626	2,626,984	1,540,740	178,399	22,205
Sweden	1,441,030	1,637,603	2,295,087	3,236,854	3,156,180
Switzerland	275,539	622,264	765,295	517,618	589,409
Syria	33,254	33,712	101,962	107,620	80,477
Turkey	1,363	8,657	488	1,687	437,101
United States	220,072,810	304,721,354	360,302,426	435,014,544	423,131,091
Alaska	114,469	146,564	148,249	215,670	162,249
Hawaii	620,675	600,193	626,510	1,529,419	964,000
Philippines	616,979	833,623	1,123,277	1,512,146	1,861,555
Puerto Rico	353,809	431,296	409,365	342,450	415,621
Uruguay	140,273	231,445	368,508	422,837	432,176
Venezuela	401,306	484,510	571,687	1,016,621	1,387,302
Yugoslavia	670	1.246	6,172	42,981	11,177
Totals, Foreign Countries[1]	**326,947,682**	**398,426,447**	**449,718,938**	**565,583,801**	**552,789,589**
Grand Totals, Canadian Exports	**665,954,071**	**756,625,925**	**849,030,417**	**1,061,181,906**	**1,070,228,609**
Exports, by Continents.					
Europe—United Kingdom	288.582,666	290,885,237	321,556,798	407,996,698	409,411,682
Other Europe	72,374,404	56,963,021	51,096,279	80,323,584	71,168,102
North America	243,225,666	325,520,323	381,792,744	460,382,596	453,439,560
South America	7,930,034	10,989,314	12,934,902	13,856,794	19,365,960
Asia	26,353,284	30,379,721	28,129,651	36,003,868	43,280,136
Oceania	17,508,431	26,279,369	35,190,081	40,150,715	50,083,453
Africa	9,979,586	15,608,940	18,329,962	22,467,651	23,479,716

---

[1] Totals include other minor countries not specified.

21.—Values and Percentages of Canadian Imports and Exports, from and to Stated Countries, passing through the United States, fiscal years ended Mar. 31, 1937 and 1938.

Country.	Merchandise Imported through United States.				Merchandise Exported through United States.			
	1937.		1938.		1937.		1938.	
	$	p.c.	$	p.c.	$	p.c.	$	p.c.
British Empire.								
United Kingdom	128,721	0·1	99,601	0·1	63,283,013	15·5	24,948,771	6·1
Ireland	1,787	3·9	Nil	–	86,141	2·3	38,879	0·8
Australia	95,000	1·0	7,739	0·1	6,555,742	24·3	8,187,795	24·3
Bermuda	754	0·5	8,640	12·0	58,144	4·2	62,942	4·1
British South Africa	13,623	0·9	19,112	0·2	2,690,508	17·3	2,974,352	18·4
British East Africa	9,650	0·3	20,410	0·6	552,302	70·9	613,471	66·6
British West Africa	8,935	0·6	Nil	–	656,722	76·2	576,570	70·2
British India	7,008	0·1	6,321	0·7	560,729	16·8	642,684	14·8
British Guiana	Nil	–	250	0·0	39,526	3·0	30,276	2·1
British Honduras	"	–	19,763	45·8	2,726	1·2	4,301	1·5
British West Indies	6,240	0·0	6,375	0·1	618,283	6·7	585,346	5·2
Ceylon	Nil	–	15	0·0	48,787	35·7	62,010	26·1
Fiji	"	–	Nil	–	57,929	15·9	108,711	21·0
Hong Kong	8,295	1·2	22,939	3·0	159,674	11·6	425,442	21·0
Newfoundland	Nil	–	Nil	–	62,872	0·8	71,601	0·8
New Zealand	"	–	"	–	2,866,835	25·6	3,871,851	24·2
Palestine	1,329	8·4	3,926	3·4	156,196	49·5	158,413	63·4
Southern Rhodesia	Nil	–	Nil	–	206,280	24·5	457,587	37·6
Straits Settlements	5,297	0·1	6,036	0·0	1,184,526	61·0	2,230,208	75·8
Totals, British Empire[1]	**295,696**	**0·1**	**221,127**	**0·1**	**80,092,096**	**16·1**	**46,390,634**	**9·0**
Foreign Countries.								
Argentina	1,534,819	13·1	1,131,376	21·7	1,357,045	36·4	2,812,202	37·9
Austria	36,814	9·5	40,139	9·0	17,935	40·7	25,514	66·0
Belgium	288,396	4·3	280,910	3·8	349,372	1·5	366,481	2·5
Brazil	233,771	25·8	230,266	26·9	2,027,751	52·3	3,040,843	63·0
Chile	12,951	25·0	12,890	18·7	442,645	46·2	643,029	69·9
China	1,242,156	29·0	671,709	20·1	486,991	9·9	200,352	6·0
Colombia	260,501	5·8	295,643	6·4	745,916	64·8	1,055,371	73·7
Cuba	294,990	64·6	388,990	47·7	545,636	37·4	776,078	44·9
Czechoslovakia	159,089	6·7	177,743	5·8	116,179	59·0	102,108	8·0
Denmark	5,418	3·4	848	0·5	301,234	18·0	205,328	22·9
Egypt	65,484	10·7	63,304	11·7	278,212	68·0	149,231	40·8
France	112,197	1·7	74,733	1·2	1,308,366	11·1	980,338	12·9
French Africa	8,295	14·5	1,096	1·9	75,822	93·7	146,467	98·0
French West Indies	Nil	–	Nil	–	21,529	11·6	43,568	22·3
Germany	294,975	2·5	211,553	1·9	1,180,040	15·0	1,358,878	11·1
Greece	39,683	59·1	23,139	41·0	6,443	0·2	196,940	35·6
Hawaii	100	0·0	Nil	–	3,557	0·2	10,141	1·1
Italy	375,397	21·8	602,402	17·9	1,382,121	29·7	743,502	32·7
Japan	497,091	10·4	593,008	10·3	1,852,500	8·6	739,264	2·8
Mexico	301,949	37·2	169,261	26·7	2,287,698	79·6	2,744,131	78·8
Netherlands	423,185	10·0	102,876	2·9	1,423,225	13·0	2,053,585	15·5
Dutch East Indies	150,281	15·0	192,075	27·4	341,040	49·4	388,168	54·8
Norway	16,170	2·3	2,227	0·3	1,107,422	16·0	535,900	8·0
Peru	2,205	0·0	2,589	0·1	496,885	45·4	731,549	59·7
Philippine Islands	288,903	36·7	121,056	18·3	272,647	18·0	356,715	19·2
Portugal	1,559	0·6	663	0·2	149,464	90·1	203,375	81·6
Portuguese Africa	Nil	–	2,358	19·6	685,608	38·7	703,628	35·5
Russia (U.S.S.R.)	38,387	29·8	10,631	1·7	185,397	99·9	61,011	11·8
Spain	169,717	14·8	55,189	6·4	142,771	80·0	18,231	82·1
Sweden	36,874	2·0	27,165	1·1	772,856	23·7	1,277,263	40·5
Switzerland	14,777	0·5	132,235	3·5	63,805	11·8	86,167	14·6
Turkey	101,963	50·3	115,161	35·0	1,255	74·4[2]	19,048	4·4
Uruguay	33,104	52·2	4,718	2·7	129,641	30·7	278,074	64·4
Venezuela	8,570	0·9	6,919	0·3	972,273	95·6	1,363,602	98·2
Totals Foreign Countries[1]	**7,338,120**	**9·2**	**6,072,637**	**7·7**	**23,611,239**	**18·0**	**27,145,227**	**20·9**
Grand Totals	**7,633,816**	**2·7**	**6,293,764**	**2·0**	**103,703,335**	**16·5**	**73,535,861**	**11·4**

---

[1] Totals include other countries not specified but are exclusive of trade with the United States.

[2] Revised since the publication of the 1938 Year Book.

Subsection 10.—Comparison of the Volume of Imports and Exports.

The statistics of the external trade of Canada are analysed in this subsection to reveal changes in the physical volume of external trade as well as in the dollar value of that trade. Value figures alone may be somewhat misleading when used to show the physical growth of production and external trade. When, for example, Table 1 of this chapter is examined, it seems to show stagnation in our external trade between the early 70's and the middle 90's of last century and a very rapid growth thereafter. Yet we know that the apparent stagnation was partly due to the fall in general prices between the '70's and the middle '90's, while the rapid growth of the later figures is exaggerated by the rise of prices after 1897, especially in the War period, 1914 to 1921. Since 1929 another precipitate decline in prices has exaggerated the actual decrease of trade. Thus the figures as published give us no true measure of the volume of our external trade, yet, of the commodities that satisfy human needs, it is the *volume* rather than the *value* with which the masses of the population are more intimately concerned. Volume is, from many points of view, a more important consideration than value, and it is desirable to secure a record of the fluctuations in the volume of the country's trade as distinguished from the value thereof. This objective is attempted with regard to world trade in Subsection 1 of this chapter in which the internationally familiar term 'quantum' has the same significance as 'volume' here. Table 22 which follows serves the same purpose with regard to Canadian external trade.

The method adopted for ascertaining the fluctuations in volume has been to take a base year—1936—and to revalue the quantities of each commodity imported or exported in any given year at the average import or export value of that commodity in the standard or base year. Where quantities are not available, the values of items are assumed to have moved in the same direction and in the same proportions as closely related commodities. For this reason the results must not be regarded as of great precision but, since the value of goods not returned by quantity and of those not comparable over a limited series of years is small in comparison with the total trade, the amount of error introduced on this account is inconsiderable. By this method it is comparatively easy to compare the volume of the trade in a particular year with that in a recent year and the margin of error is fairly small. When, however, a comparison of the volume of trade in a particular year with that of a more remote year is undertaken, the margin of error is very much greater. Certain new commodities have come into existence in the course of the period, while the qualities of others have been materially changed; further, various new items have been added to the customs classifications, and it is not always possible to say just what customs items at present correspond with those of a year as long past as 1914. For these reasons comparisons with the pre-War fiscal year ended 1914 were discontinued after 1929. This comparison for 1929 and certain previous years appeared on pp. 581-583 of the 1930 Year Book. For similar reasons the retention of 1926 as the base year was tending to lessen the reliability of recent calculations, and, consequently, 1936 has been taken as a new base year in the present edition. Comparisons with 1936 were carried back to 1932 at pp. 583-585 of the 1938 Year Book.

In Table 22 the values and volumes of imports and exports, respectively, for the years 1933 to 1938 are compared with 1936, for the main groups, as follows: the imports and exports are first shown at the values at which the trade was recorded; the same imports and exports are then shown at the value they would have had if the average price or unit value had been the same in each year as it was in 1936. In other words, the figures on the basis of 1936 average values enable a comparison to be made of the imports or exports for the given years on the basis of variations in quantity only, variations due to different prices having been eliminated. Index numbers of declared values, that is, the total declared values of the imports or exports in each year expressed as percentages of 1936, are then given. These are followed by the index numbers of average values, which show the prices at which goods were imported or exported in each year expressed as percentages of the prices in 1936. Finally, the index numbers of physical volume show the relative quantity of merchandise imported or exported in each year expressed as a percentage of the quantity of the same merchandise in 1936.

The fiscal year 1938 shows a general increase in the volume of imports under all groups, indicative of the recovery of the purchasing power of the people of Canada. The greatest change since the low period of the depression represented by the fiscal year 1933 is the increase in the imports of iron and its products.

In the latter half of Table **22**, dealing with exports, the index numbers show a very encouraging recovery since the fiscal year 1933 in both the volume of exports and in the average values or the prices at which they sold in the world markets. Recovery in volume has been particularly marked in the cases of the wood and paper, iron, and non-metallic mineral groups. These products represent to a large extent capital goods or materials, and the demand for them was very much curtailed during the worst years of the depression. The volume of vegetable products exported in 1938 was very low owing to the drought of the 1937 agricultural season.

The index numbers of average values of imports rose from 88·3 in 1933 to 105·9 in 1938, or by about 20 p.c., while the index of average values of exports rose in the same period from 78·6 to 114·3, or by 45 p.c. This greater rise in the prices of exports than in those of imports represents welcome progress toward a betterment in Canada's barter terms in world trade, which suffered so severely during the depression owing to the much greater decline in the prices of primary goods than in those of highly fabricated commodities. See also Subsection 1, pp. 476-485 regarding price disparities in world trade.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1933-38.

Group.	1933.	1934.	1935.	1936.	1937.	1938.[1]
	IMPORTS FOR CONSUMPTION.					
Values as Declared.	$'000	$'000	$'000	$'000	$'000	$'000
Agricultural and Vegetable Products	88,289	90,829	109,419	110,342	131,400	146,335
Animals and Their Products	15,439	19,842	19,957	24,314	27,863	30,400
Fibres and Textiles	61,215	79,372	81,798	89,814	104,811	108,932
Wood and Paper	20,506	19,358	21,200	23,272	28,928	34,221
Iron and Its Products	58,918	69,127	100,056	114,254	150,239	209,237
Non-Ferrous Metals	18,095	20,171	28,497	33,686	37,038	47,064
Non-Metallic Minerals	87,658	83,397	102,428	105,421	116,948	136,663
Chemicals and Allied Products	25,455	25,584	28,872	29,920	33,105	36,890
Miscellaneous	30,809	26,119	30,204	31,696	41,544	49,328
Totals, Declared Values	**406,384**	**433,799**	**522,431**	**562,719**	**671,876**	**799,070**

---

[1] Subject to revision.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1933-38—continued.

Group.	1933.	1934.	1935.	1936.	1937.	1938.[1]
	IMPORTS FOR CONSUMPTION—concluded.					
On the Basis of 1936 Average Values.	$'000	$'000	$'000	$'000	$'000	$'000
Agricultural and Vegetable Products	88,862	93,225	105,583	110,342	126,983	135,376
Animals and Their Products	19,579	22,705	22,404	24,314	25,900	27,682
Fibres and Textiles	113,647	86,205	82,647	89,814	98,906	101,251
Wood and Paper	17,760	18,210	21,728	23,272	28,934	34,663
Iron and Its Products	53,683	74,398	103,237	114,254	148,360	193,411
Non-Ferrous Metals	21,031	22,712	28,781	33,686	41,584	52,451
Non-Metallic Minerals	86,560	93,520	94,819	105,421	113,610	126,761
Chemicals and Allied Products	25,102	25,600	28,629	29,920	32,851	37,446
Miscellaneous	33,950	28,760	30,328	31,696	40,670	45,477
Totals, at 1936 Average Values	**460,174**	**465,335**	**518,156**	**562,719**	**657,798**	**754,518**
	INDEX NUMBERS. (1936=100.)					
Index Numbers of Declared Values.						
Agricultural and Vegetable Products	80·0	82·3	99·2	100·0	119·1	132·6
Animals and Their Products	63·5	81·6	82·1	100·0	114·6	125·0
Fibres and Textiles	68·2	88·4	91·1	100·0	116·7	121·3
Wood and Paper	88·1	83·2	91·1	100·0	124·3	147·0
Iron and Its Products	51·6	60·5	87·6	100·0	131·5	183·1
Non-Ferrous Metals	53·7	59·9	84·6	100·0	110·0	139·7
Non-Metallic Minerals	83·2	79·1	97·2	100·0	110·9	129·6
Chemicals and Allied Products	85·1	85·5	96·5	100·0	110·6	123·3
Miscellaneous	97·2	82·4	95·3	100·0	131·6	155·6
Total Indexes of Declared Values	**72·2**	**77·1**	**92·8**	**100·0**	**119·4**	**142·0**
Index Numbers of Average Values.						
Agricultural and Vegetable Products	99·4	97·4	103·6	100·0	103·5	108·1
Animals and Their Products	78·9	87·4	89·1	100·0	107·6	109·8
Fibres and Textiles	53·9	92·1	99·0	100·0	106·0	107·6
Wood and Paper	115·5	106·3	97·6	100·0	90·0	98·7
Iron and Its Products	109·6	92·9	96·9	100·0	101·3	108·2
Non-Ferrous Metals	86·0	84·4	99·0	100·0	89·1	89·7
Non-Metallic Minerals	101·3	89·2	108·0	100·0	102·9	107·8
Chemicals and Allied Products	101·4	99·9	100·8	100·0	100·8	98·5
Miscellaneous	90·7	90·8	99·6	100·0	102·1	108·5
Total Indexes of Average Values	**88·3**	**93·0**	**100·8**	**100·0**	**102·1**	**105·9**
Index Numbers of Physical Volume.						
Agricultural and Vegetable Products	80·5	84·5	95·7	100·0	115·1	122·7
Animals and Their Products	80·5	93·4	92·1	100·0	106·5	113·9
Fibres and Textiles	126·5	96·0	92·0	100·0	110·1	112·7
Wood and Paper	76·3	78·2	93·4	100·0	124·3	148·9
Iron and Its Products	47·0	65·1	90·4	100·0	129·9	169·3
Non-Ferrous Metals	59·5	67·4	85·4	100·0	123·4	155·7
Non-Metallic Minerals	82·1	88·7	89·9	100·0	107·8	120·2
Chemicals and Allied Products	83·9	85·6	95·7	100·0	109·8	125·2
Miscellaneous	107·1	90·7	95·7	100·0	128·3	143·5
Total Indexes of Physical Volume	**81·8**	**82·7**	**92·1**	**100·0**	**116·9**	**134·1**
	EXPORTS OF CANADIAN PRODUCE.					
Values as Declared.	$'000	$'000	$'000	$'000	$'000	$'000
Agricultural and Vegetable Products	203,371	205,805	226,234	242,862	346,451	235,324
Animals and Their Products	54,333	75,151	86,848	100,932	133,941	136,113
Fibres and Textiles	4,730	7,829	7,523	10,274	12,830	14,225
Wood and Paper	120,887	143,142	160,933	181,832	223,918	253,435
Iron and Its Products	17,277	26,641	40,736	52,368	53,173	69,744
Non-Ferrous Metals	96,906	168,375	191,345	212,547	230,152	292,453
Non-Metallic Minerals	9,216	14,809	15,654	19,084	26,081	29,343
Chemicals and Allied Products	11,100	13,844	15,270	16,018	19,238	20,926
Miscellaneous	10,244	10,358	12,083	13,113	15,398	18,666
Totals, Declared Values	**528,064**	**665,954**	**756,626**	**849,030**	**1,061,182**	**1,070,229**

---

[1] Subject to revision.

22.—Comparison of the Values and Volumes of the External Trade of Canada, by Main Groups, fiscal years ended Mar. 31, 1933-38—concluded.

Group.	1933.	1934.	1935.	1936.	1937.	1938.[1]
	EXPORTS OF CANADIAN PRODUCE—concluded.					
On the Basis of 1936 Average Values.	$'000	$'000	$'000	$'000	$'000	$'000
Agricultural and Vegetable Products	285,917	238,053	227,209	242,862	306,908	183,292
Animals and Their Products	68,824	83,932	90,031	100,932	130,634	131,276
Fibres and Textiles	6,169	8,541	7,282	10,274	11,674	13,242
Wood and Paper	106,264	142,565	161,416	181,832	211,784	220,442
Iron and Its Products	13,004	26,187	41,423	52,368	50,902	62,446
Non-Ferrous Metals	157,881	196,725	231,099	212,547	219,611	258,503
Non-Metallic Minerals	9,944	15,758	16,677	19,084	25,726	28,363
Chemicals and Allied Products	9,983	14,420	15,120	16,018	19,771	20,179
Miscellaneous	13,824	12,363	13,528	13,113	14,813	18,645
Totals, at 1936 Average Values	**671,810**	**738,544**	**803,785**	**849,030**	**991,823**	**936,388**
	INDEX NUMBERS. (1936=100.)					
Index Numbers of Declared Values.						
Agricultural and Vegetable Products	83·7	84·7	93·2	100·0	142·7	96·9
Animals and Their Products	53·8	74·5	86·0	100·0	132·7	134·9
Fibres and Textiles	46·0	76·2	73·2	100·0	124·9	138·5
Wood and Paper	66·5	78·7	88·5	100·0	123·1	139·4
Iron and Its Products	33·0	50·9	77·8	100·0	101·5	133·2
Non-Ferrous Metals	45·6	79·2	90·0	100·0	108·3	137·6
Non-Metallic Minerals	48·3	77·6	82·0	100·0	136·7	153·7
Chemicals and Allied Products	69·3	86·4	95·3	100·0	120·1	130·6
Miscellaneous	78·1	79·0	92·1	100·0	117·4	142·3
Total Indexes of Declared Values	**62·2**	**78·4**	**89·1**	**100·0**	**125·0**	**126·1**
Index Numbers of Average Values.						
Agricultural and Vegetable Products	71·1	86·0	99·6	100·0	112·9	128·4
Animals and Their Products	78·9	89·5	96·5	100·0	102·5	103·7
Fibres and Textiles	76·7	91·7	103·3	100·0	109·9	107·4
Wood and Paper	113·8	100·4	99·7	100·0	105·7	115·0
Iron and Its Products	132·9	101·7	98·3	100·0	104·5	111·7
Non-Ferrous Metals	61·4	85·6	82·8	100·0	104·8	113·1
Non-Metallic Minerals	92·7	94·0	93·9	100·0	101·4	103·5
Chemicals and Allied Products	111·2	96·0	101·0	100·0	97·3	103·7
Miscellaneous	74·1	83·8	89·3	100·0	103·9	100·1
Total Indexes of Average Values	**78·6**	**90·2**	**94·1**	**100·0**	**107·0**	**114·3**
Index Numbers of Physical Volume.						
Agricultural and Vegetable Products	117·7	98·0	93·6	100·0	126·4	75·5
Animals and Their Products	68·2	83·2	89·1	100·0	129·4	130·1
Fibres and Textiles	60·0	83·1	70·9	100·0	113·6	128·9
Wood and Paper	58·4	78·4	88·8	100·0	116·5	121·2
Iron and Its Products	24·8	50·0	79·1	100·0	97·2	119·2
Non-Ferrous Metals	74·3	92·6	108·7	100·0	103·3	121·6
Non-Metallic Minerals	52·0	82·6	87·4	100·0	134·8	148·6
Chemicals and Allied Products	62·3	90·0	94·4	100·0	123·4	126·0
Miscellaneous	105·4	94·3	103·2	100·0	113·0	142·2
Total Indexes of Physical Volume	**79·0**	**87·0**	**94·7**	**100·0**	**116·8**	**110·3**

---

[1] Subject to revision.

Section 4.—The Tourist Trade of Canada.*

Tourist Expenditures in Canada.—In recent years the tourist trade has become an important source of revenue in certain sections of the Dominion, materially affecting the balance of trade. It represents the economic disposition of national assets in which Canada is particularly rich, namely: its picturesque scenery; its invigorating climate; its opportunities for hunting, fishing, and boating, as well as for winter sports—for the exploitation of which a considerable capital expenditure has been made on hotel accommodation, improved highways, and other attractions. Those entering from the United States in automobiles are by far the most important class of tourist. The business accruing to the Dominion in this manner represents some return for expenditures on highways which have been very large in the period since the War. In order to attract this traffic, highways have been built through regions of picturesque scenery, such as the Rocky mountains, northern Ontario, and the Laurentians and Gaspe in Quebec. A further asset for Canada arises from the fact that these scenic regions with their invigorating climate are at their best in the summer holiday season when motorists are most ready to travel. The expenditure of travellers coming to Canada from other countries has the same effect, in so far as its influence on the balance of trade is concerned, as the export of additional commodities would have. Indeed, in so far as commodities are sold to tourists travelling in the Dominion, our exportable surplus of such commodities is reduced.

It is impossible to obtain a direct record of expenditures of this kind. Moreover, even a rough estimate of the total is extremely difficult to make, visitors to Canada being of all classes, engaging in widely different activities or forms of recreation, remaining for varying periods, with expenditures undoubtedly ranging from very small to very large amounts.

Tourists who enter Canada may be divided into two broad classes: (1) those coming in *via* ocean ports; (2) those entering from the United States, the latter subdivided into entries by (*a*) automobile, (*b*) rail or steamer, (*c*) other modes of travel as bus, aeroplane, ferry, etc. In 1938 these classes are estimated to have expended in Canada (1) $14,000,000, and (2) $253,000,000, respectively, with entries under (*a*) $178,000,000, (*b*) $58,000,000, and (*c*) $19,000,000.

The Department of National Revenue records the number of tourists entering Canada in automobiles from the United States through each of the ports of entry along the border. Estimates of the expenditures of tourists of this class in 1938, according to the provinces by which they entered, are as follows: Maritime Provinces, $14,000,000; Quebec, $31,000,000; Ontario, $116,000,000; Manitoba, $3,000,000; Saskatchewan, $1,000,000; Alberta, $1,000,000; and British Columbia, $12,000,000.

Expenditures of Canadian Tourists Abroad.—Canadian tourists visiting other countries travel in the main to the British Isles and other European countries on visits home, or as sightseers. Again, many of them, especially elderly or delicate persons, go to Florida, Bermuda, or the West Indies. These tourists may be classified in the same way as those entering Canada. The total expenditures of such Canadian tourists to other countries were estimated in 1938 to be as follows: to overseas countries, $17,000,000; to the United States by automobile, $49,000,000; to the United States by rail or steamer, $29,000,000; and to the United States by other modes of travel, $25,000,000; a total of $120,000,000.

---

* Abridged from "The Tourist Trade in Canada, 1920-26", and reports for each year from 1927-38, inclusive, published by the Dominion Bureau of Statistics and obtainable on application. These reports contain a full explanation of the methods used in making the estimates.

Summary.—For the years 1924 to 1938 the total estimated expenditures of tourists from other countries in Canada, as compared with those of Canadian tourists in other countries, are given in Table 23.

23.—Estimated Tourist Expenditures in Canada and of Canadians Abroad, calendar years 1924-38.

Year.	By Tourists from Other Countries in Canada.					By Canadian Tourists in Other Countries.	Excess by Tourists from Other Countries in Canada.
	Via Ocean Ports.	*Via* Automobile from U.S.	*Via* Rail or Boat from U.S.	*Via* Bus, Aeroplane, etc. from U.S.	Total.		
	$	$	$	$	$	$	$
1924	17,012,000	76,662,000	79,328,000	[1]	173,002,000	84,973,000	88,029,000
1925	15,430,000	98,416,000	79,328,000	[1]	193,174,000	86,160,000	107,014,000
1926	12,235,000	109,604,000	79,328,000	[1]	201,167,000	98,747,000	102,420,000
1927	14,444,000	153,768,000	70,265,000	[1]	238,477,000	108,750,000	129,727,000
1928	13,735,000	188,974,000	72,521,000	[1]	275,230,000	107,522,000	167,708,000
1929	13,794,000	215,577,000	80,008,000	[1]	309,379,000	121,645,000	187,734,000
1930	12,955,000	202,409,000	63,874,000	[1]	279,238,000	100,389,000	178,849,000
1931	12,018,000	188,129,000	50,629,000	[1]	250,776,000	76,452,000	174,324,000
1932	10.543,000	159,838,000[2]	42,067,000[2]	[1]	212,448,000[2]	57,403,000	155,045,000
1933	7,763,000	77,250,000[2]	32,111,000[2]	[1]	117,124,000[2]	50,860,000	66,264,000
1934	9,455,000	86,259,000	34,260,000	16,000,000	145,974,000	63,658,000	82,316,000
1935	10,117,000	132,162,000	53,499,000	19,000,000	214,778,000	95,600,000	119,178,000
1936	12,946,000	153,509,000	64,844,000	20,000,000	251,299,000	110,400,000	140,899,000
1937	16,972,000	181,332,000	65,277,000	26,627,000	290,208,000	124,422,000	165,786,000
1938[3]	14,000,000	178,000,000	58,000,000	19,000,000	269,000,000	120,000,000	149,000,000

[1] Information not available on a comparable basis. [2] Converted into Canadian funds at average rates of exchange for the period. [3] Preliminary figures.

Until the depression made itself felt in 1930, there was a steady increase in the amounts spent both by tourists from other countries in Canada and by Canadians in other countries. During the years 1930-32 the tourist trade, in spite of successive declines, exhibited a surprising vitality as compared with the generally depressed state of trade and industry. In each of these years the expenditures of tourists in Canada (and in the latter two the balance after deducting the corresponding expenditures of Canadians in foreign countries) constituted an 'invisible' export of greater value than any single commodity exported. A marked contraction in both volume of travel and tourist expenditures occurred in 1933 and conditions in 1934 were very little better. A pronounced improvement in tourist trade took place in 1935 and since then it has maintained a level approximating that existing before the depression.

Section 5.—Balance of International Payments.*

Statements of the Canadian balance of international payments, as in Tables 24 and 25, provide an annual summary of the current transactions in merchandise, gold, and services, and the movements of capital between Canada and other countries. Thus, besides the visible balance of merchandise trade, account is taken of the less apparent exchanges of services and capital frequently termed the 'invisible' items. The statement is divided into two accounts, the current account and the capital account, in order to distinguish current income and disbursements from transactions on capital account.

---

* Revised under the direction of Herbert Marshall, B.A., F.S.S., Chief of the Internal Trade Branch of the Dominion Bureau of Statistics.

Transactions on Current Account.—The current account includes all current transactions in goods, gold, and services. The total credits in the account show estimates of credits received by Canada each year from the sale of merchandise, gold, and services to other countries, while total debits include estimated payments to other countries by the Dominion for purchases of merchandise or services, including payments of interest and dividends on British and foreign investments in Canada. Therefore, the current account furnishes a measure of the total external income and disbursements of the nation. It also indicates the net movement of capital between Canada and other countries each year, for any difference between current income and disbursements abroad must in theory reflect a movement of capital. For example, when credits on current account exceed debits there is a credit balance reflecting an outflow of capital from Canada, as current income from abroad is greater than all disbursements of a current character abroad under such circumstances, the resulting surplus supply of foreign exchange being utilized either to increase Canadian capital assets abroad or to reduce capital liabilities abroad. Conversely, when disbursements abroad on current account exceed external income there is a debit balance reflecting an import of capital. In other words, to obtain foreign exchange under the latter circumstances to meet the excess of current disbursements over income, Canada either has borrowed capital abroad or disposed of or withdrawn Canadian assets abroad. Thus, while the balancing item of the current account reflects the net movement of capital, its accuracy is limited by the degree of completeness and precision attained in the estimates of the current account items. Furthermore, it is only at best a measure of the net movement of capital and therefore does not disclose the great diversity and large volume of movements of capital revealed by the direct analysis of capital movements in the capital account.

Capital Movements.—The capital account delineates the movements of capital between Canada and other countries. The broad distinction between transactions appearing in the current account and those appearing in the capital account lies in the fact that the former group represents payments for current purchases of goods or services, whereas the latter group are on capital account and usually reflect changes in either Canada's external assets or liabilities, although all changes of the latter type, it should be noted, do not give rise to movements of capital. Thus, the capital account performs a dual function. It indicates the general significance of capital movements in the foreign exchange market and accordingly, along with the current account, throws light upon the background of transactions upon which the foreign exchange value of the Canadian dollar is dependent. It also makes it possible to appraise the effects of the movements of capital, during any period, upon the Canadian balance of international indebtedness. For the potential effects of capital movements upon the Canadian economy may only be appreciated by studying the volume and character of the various counter movements. Often, although the net movement of capital during a period may be relatively small, the significant effects that the gross movements have upon the composition of the foreign assets and liabilities of Canada may be considerable.

The Dominion Bureau of Statistics has recently completed a comprehensive study of the Canadian balance of international payments from 1926 to date and it is, consequently, now possible to draw up for this period revised statements of the balance of payments which incorporate new information that has become available.*

---

* "The Canadian Balance of International Payments—A Study of Methods and Results"; also annual reports on the Canadian Balance of International Payments; published by and obtainable from the Dominion Bureau of Statistics.

Of special interest is the detailed analysis of capital movements between Canada and other countries that has been revealed in the capital account.

Gold Held under Earmark by the Bank of Canada.—Since February, 1936, the Bank of Canada has been holding gold under earmark for clients abroad. These holdings presumably may be of either domestic or foreign origin. The physical movement of gold into or out of Canada is recorded in the trade tables as explained on pp. 474-476. Since changes in the gold held under earmark involve international financial transactions which are considered in estimating Canada's balance of international payments (see Table **25**) the amounts so held by the Bank of Canada are shown here in Statement XV.

XV.—HOLDINGS OF GOLD UNDER EARMARK BY THE BANK OF CANADA, BY MONTHS, 1936-38.

Month.	1936.		1937.		1938.	
	Net Change During Month.	Total at End of Month.	Net Change During Month.	Total at End of Month.	Net Change During Month.	Total at End of Month.
	fine oz.	fine oz.	fine oz.	fine oz.	fine oz.	fine oz.
January	Nil	Nil	+130,661	1,483,158	Nil	1,932,344
February	+172,227	172,227	Nil	1,483,158	"	1,932,344
March	+89,813	262,040	+ 72,679	1,555,837	+265,269	2,197,614
April	Nil	262,040	Nil	1,555,837	+131,616	2,329,229
May	+147,622	409,662	"	1,555,837	+1,011,218	3,340,447
June	+292,781	702,443	"	1,555,837	Nil	3,340,447
July	+237,938	940,381	+ 95,561	1,651,397	"	3,340,447
August	Nil	940,381	Nil	1,651,397	+342	3,340,790
September	+148,796	1,089,177	"	1,651,397	−580,318	2,760,471
October	+ 69,381	1,158,559	+ 53,457	1,704,855	+924,854	3,685,325
November	Nil	1,158,559	+151,278	1,856,133	+229,681	3,915,006
December	+193,939	1,352,497	+ 76,212	1,932,344	+189,634	4,104,640

Balance of Payments in Recent Years.—The outstanding features of the Canadian balance of international payments in the five years 1934 to 1938, shown in Table **24**, have been the credit balances on current account in each year reflecting substantial surpluses of current external income over and above all current disbursements abroad. Large credit balances from exports of merchandise and from the tourist trade and growing credits from the sale of gold were more than sufficient in each year to meet payments to other countries on account of interest and dividends, freight, and miscellaneous services.

The large outflow of capital indicated by the credit balances on current account is analysed in the capital account. In each year there have been large outward movements of capital for the retirement of Canadian securities owned abroad with accompanying reductions in the contractual liabilities abroad of Canadian debtors. Other security transactions arising from the international trade in outstanding securities have in each year, except 1934, resulted in inflows of capital indicating a sustained external demand, much of which was from the United Kingdom, for Canadian securities. Other capital movements during the period under review have been outward in large volume and have been connected with the activities of banks, insurance companies and other financial institutions, and international direct investments. The general effects of the movements of capital during the period have been in the direction of materially reducing the contractual liabilities abroad of Canadian borrowers with accompanying declines in the interest payments on externally-held Canadian bonds, as well as in that of increasing somewhat Canadian assets abroad.

The largest external current income in the five post-depression years shown was received in 1936 and 1937. In both years there were also very substantial credit balances on current account. A decline in the credit balance in the latter year was due to a greater increase in total current disbursements than in current credits, the result principally of a substantial expansion in merchandise imports in 1937 and the decline in grain exports. While the credit balance on merchandise account was reduced in 1937 there were substantial increases in credits from gold and the tourist trade that offset in part the decline in merchandise credits and the increase in debits for interest and dividends, freight, and miscellaneous services.

The net outward movements of capital were very heavy in both 1936 and 1937. The extraordinary outflow for the redemption of Canadian securities owned outside of Canada in the former year was considerably reduced in 1937 with the development of less favourable circumstances for refinancing. The net movement of capital from the trade in outstanding securities was relatively small in each year taken as a whole, although the volume of transactions was very great. A small inflow of capital from these transactions in 1936 was followed by a small outflow in 1937. Other capital movements, outward in large volume in 1936, continued to expand in 1937. A smaller part of the total outflow of capital in 1937 was employed for the reduction of Canadian liabilities abroad than in the two preceding years.

The Canadian balance of international payments is shown in summary form for the five latest years in Table **24**, while greater detail for the two years 1936 and 1937 is given in Table **25**.

24.—Summary of Canadian Balance of International Payments, 1934-38.

NOTE.—Net receipts or credits (+); net payments or debits (—).

Item.	1934.	1935.	1936.	1937.	1938.[1]
	$'000,000	$'000,000	$'000,000	$'000,000	$'000,000
CURRENT ACCOUNT OF GOODS, GOLD, AND SERVICES.					
Merchandise	+148·1	+192·7	+322·2	+213·3	+180·5
Gold	+109·6	+116·7	+131·0	+145·0	+156·5
Tourist trade	+ 82·4	+119·2	+140·9	+170·3	+145·0
Interest and dividends	−211·6	−208·6	−233·8	−246·2	−242·0
Freight	− 27·9	− 14·1	− 17·8	− 25·5	− 20·0
Miscellaneous services	− 25·8	− 29·0	− 34·0	− 38·7	− 35·2
Net Receipts or Credits on Current Account	**+ 74·8**	**+176·9**	**+308·5**	**+218·2**	**+184·8**
CAPITAL ACCOUNT.					
New issues and retirements of securities	− 58·0	−154·4	−163·9	− 88·4	− 60·1
Other security transactions	+ 8·9	+ 51·0	+ 7·8	− 4·8	+ 27·0
Other capital movements	− 66·7	− 70·1	− 97·6	−105·6	−127·0
Net Outward Capital Movement	**−115·8**	**−173·5**	**−253·7**	**−198·8**	**−160·1**
Residual item	+ 41·0	+ 3·4	+ 54·8	+ 19·4	+ 24·7

[1] Preliminary figures.

25.—Estimated Balance of International Payments, 1936 and 1937.

NOTE.—If the estimates of the current and capital items below were absolutely correct and all inclusive, the balancing item of the current account and the balancing item of the capital account would be equal. The difference between these two amounts in the statement represents either errors in the computations or the omission of transactions which could not be traced at the time the tables were prepared. Figures for both years are subject to revision. Corresponding figures for earlier years back to 1926 may be found in the report "The Canadian Balance of International Payments—A Study of Methods and Results", issued by the Dominion Bureau of Statistics.

Item.	1936.			1937.		
	Credits—Exports, Visible and Invisible.	Debits—Imports, Visible and Invisible.	Net Credits (+) or Debits (−).	Credits—Exports, Visible and Invisible.	Debits—Imports, Visible and Invisible.	Net Credits (+) or Debits (−).
	$'000,000	$'000,000	$'000,000	$'000,000	$'000,000	$'000,000
Current Account of Goods, Services, and Gold.						
Commodity Trade—						
Recorded merchandise exports and imports	957·4	635·2		1,125·0	808·9	
Unrecorded imports of ships	–	0·3		–	2·3	
	957·4	635·5		1,125·0	811·2	
Deductions for settlers' effects and other non-commercial exports and imports	3·6	9·1		3·9	9·8	
	953·8	626·4		1,121·1	801·4	
Correction for over-valuation of imports	–	1·7		–	6·2	
	953·8	624·7		1,121·1	795·2	
Minus gold-bearing quartz and bullion from exports and plus silver and other coin on imports	5·9	1·0		111·4	1·2	
Corrected totals of commodity trade	947·9	625·7	+322·2	1,009·7	796·4	+213·3
Gold Exports and Imports—[1]						
Non-monetary	132·0	1·0		145·1	0·1	
Monetary	Nil	Nil		Nil	Nil	
Totals, Gold	132·0	1·0	+131·0	145·1	0·1	+145·0
Freight receipts and payments, *n.o.p.*	80·2	98·0	−17·8	111·7	137·2	−25·5
Tourist expenditures	251·3	110·4	+140·9	294·7	124·4	+170·3
Interest and dividend receipts and payments	76·2	310·0	−233·8	78·8	325·0	−246·2
Immigrants' remittances	7·1	18·0	−10·9	7·5	22·0	−14·5
Government receipts and expenditures	6·5	11·0	−4·5	7·6	11·1	−3·5
Charitable and missionary contributions	1·0	2·0	−1·0	0·9	2·0	−1·1
Advertising transactions	1·8	1·4	+0·4	2·7	2·5	+0·2
Motion picture remittances	Nil	3·5	−3·5	Nil	4·5	−4·5
Capital of immigrants and emigrants	1·7	3·1	−1·4	1·6	4·1	−2·5
Earnings of Canadian residents employed in U.S.A. and U.S. residents employed in Canada	3·6	1·7	+1·9	4·9	1·7	+3·2
Net payments for entertainment services, royalties, etc., not included above	–	15·0	−15·0	–	16·0	−16·0
Totals, Current Account	**1,509·3**	**1,200·8**	**+308·5**	**1,665·2**	**1,447·0**	**+218·2**
Capital Account.						
New issues of Canadian securities (par value)	110·1	–		93·0	–	
Commissions and discounts	4·0	–		3·5	–	
Net New Issues	106·1	–	+106·1	89·5	–	+89·5
Retirements of Canadian securities (including maturities and redemptions)	–	270·0	−270·0	–	177·9	−177·9
Purchases and sales of outstanding securities	422·5	414·7	+7·8	506·6	511·4	−4·8
Net capital transactions of international branch plants, etc.[2]	–	74·2	−74·2	–	82·6	−82·6
Insurance transactions, *n.o.p.*	19·0	45·0	−26·0	24·0	34·0	−10·0
Net change in estimated net assets of Canadian banks outside Canada	2·6	–	+2·6	–	13·0	−13·0
Totals, Capital Account	**550·2**	**803·9**	**−253·7**[3]	**620·1**	**818·9**	**−198·8**[3]

---

[1] All gold coin and bullion exported and imported, including exports of gold-bearing quartz and 'ear-marked' gold.

[2] Included in this item are the net movements of funds resulting from the operations of the branches, subsidiaries, etc., of British and foreign companies in Canada, subsidiaries, etc., of Canadian companies operating outside of Canada and the net movements of funds resulting from the international transactions of Canadian trust companies. Although the more important current transactions of these concerns, such as dividends, have been included in the current account, various small items of current transactions which are difficult to segregate, remain in this item.

[3] Direct estimate of net outflow of capital.

CHAPTER XVII.—INTERNAL TRADE.

This treatment of trade within the Dominion commences with a general statement on interprovincial trade, followed by sections dealing with the statistics of the grain trade and of the marketing of live stock and animal products. Statistics of cold storage facilities and of commodities in cold storage are next in order. Following these will be found sections relating to various administrative services connected with trade, including: the payment of bounties; the granting of patents, copyrights, and trade marks; weights and measures; and electricity and gas inspection. Section 9 deals with the statistics of wholesale and retail merchandising and of various types of service establishments. The concluding section of the chapter contains a brief treatment of the control and sale of alcoholic liquors and beverages in Canada.

Section 1.—Interprovincial Trade.*

Canada may be divided into the following five economic regions, each deriving its specific character from the predominant occupations of its people:—

1. *The Eastern Fishing, Lumbering, and Mining Region,* comprising the river valley and gulf of the St. Lawrence, together with the Atlantic coast; in other words, the greater part of the Maritime Provinces, the northern part of the province of Quebec (excluding the former district of Ungava), and a portion of northern Ontario.

2. *The Eastern Agricultural and Industrial Region,* comprising the cultivated portions of the Maritime Provinces and of the provinces of Quebec and Ontario. In the latter provinces the cultivated areas extend along the banks of the St. Lawrence and its tributaries.

3. *The Central Agricultural Region,* extending from the Red River valley to the Rocky mountains and from the Canada-United States boundary to about 56° N. lat.

4. *The Western Fishing, Mining, and Lumbering Region,* comprising the western portion of the province of Alberta, the whole of British Columbia, and the southern portion of Yukon.

5. *The Northern Fishing, Mining, and Hunting Region,* extending from the regions of permanent settlement northwards, and from the boundary of Labrador to the Pacific and to the Alaskan boundary. This vast region is sparsely inhabited by indigenous nomadic tribes engaged in fishing and hunting for their own support or for exchange with the fur-trading companies, and with individual traders who visit the region. In recent years mining activity has been developing in this region, especially along its southern fringe and in the basin of the Mackenzie river. In the east, a well-equipped port is located at Churchill. The Hudson Bay railway and this ocean terminal provide a short route to Europe for the products of the Prairie Provinces.

Great differences exist between the products of these various regions; even the fisheries and lumber products of the East are quite distinct from those of British Columbia. The needs of the people throughout the country are met to a great extent by the exchange of the products of one region for those of another.

Interprovincial trade in what is now Canada had its beginning, many years before Confederation, in the exchange of the furs and lumber products of Upper and Lower Canada for the fisheries and mineral products of the Maritimes. Although a large part of British Columbia lumber, minerals, fish, and fruits, Prairie Provinces agricultural products, Ontario minerals, Quebec wood-pulp, paper, and asbestos, and Maritime Provinces lumber, potatoes, fruit, and fish are exported to foreign countries and the central manufacturing provinces import the greater part of their coal, there is a large trade of manufactured and raw materials between the economic regions of the Dominion. This trade is carried principally on the railways and, to a lesser extent, on the St. Lawrence river and Great Lakes and in late years an increasing amount is being carried by motor trucks.

---

*Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch, Dominion Bureau of Statistics.

Monthly railway traffic reports and an annual summary report are published by the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics showing, for each province and for the Dominion as a whole, the total *revenue* freight traffic of all railways, divided into 76 classes of commodities. The data also show the quantity of each class that originated and terminated in each province, and are of use in computing the net imports and exports of each province for each of the 76 classes of commodities. These statistics show rail traffic only, a limitation which should be borne in mind in connection with the trade of provinces having water transportation. Summary figures for all commodities are given in Table **1**. The totals, however, give no indication of how the imports of manufactures are offset by the exports of grain, coal, etc., in particular provinces. Such analyses are possible only from the detailed data.

The revenue freight traffic movement on the steam railways of Canada fluctuates to a certain extent with the yield of the crops and with activity in the mining and construction industries involving heavy movements of low-grade freight. The general trend from 1921 to 1928 was upward, increasing from 83,814,436 tons of freight carried in 1921 to 119,227,758 tons in 1928. In 1929, however, a decrease to 114,600,778 tons was reported and, with the industrial depression, there were still greater decreases to 57,099,111 tons in 1933, but traffic began to improve during the last six months of 1933 and each month of 1934 showed an increase over the corresponding month of 1933 and the total for the year was 18 p.c. greater than for 1933. The rate of increase was reduced somewhat during the first half of 1935 but continued through to the end of 1937. Except for a rise in September and October, 1938 freight traffic was considerably below that of 1937.

1.—Railway Revenue Freight Traffic Movement in Canada, by Provinces, calendar years 1936 and 1937.

Province.	Originating in Canada or Specified Province.		Received from Foreign Connections.		Totals, Freight Originating.[1]	
	1936.	1937.	1936.	1937.	1936.	1937.
	tons.	tons.	tons.	tons.	tons.	tons.
Prince Edward Island	186,392	176,952	396	432	186,788	177,384
Nova Scotia	6,643,220	7,501,465	137,972	178,391	6,781.192	7,679,856
New Brunswick	1,849,825	2,640,200	423,327	532,028	2,273,152	3,172,228
Quebec	8,530,254	10,336,360	3,157,279	3,916,673	11,687,533	14,253,033
Ontario	16,444,910	19,430,154	16,024,858	16,872,489	32,469,768	36,302,643
Manitoba	3,926,548	4,422,607	163,103	218,662	4,089,651	4,641,269
Saskatchewan	6,200,044	3,308,823	299,565	256,768	6,499,609	3,565,591
Alberta	6,969,960	6,615,343	216,081	135,857	7,186,041	6,751,200
British Columbia	3,881,847	4,868,280	454,365	583,677	4,336,212	5,451,957
Totals	**54,633,000**	**59,300,184**	**20,876,946**	**22,694,977**	**75,509,946**	**81,995,161**

For footnote, see end of table, p. 568.

1.—Railway Revenue Freight Traffic Movement in Canada, by Provinces, calendar years 1936 and 1937—concluded.

Province.	Terminating in Canada or Specified Province.		Delivered to Foreign Connections.		Totals, Freight Terminating.[1]	
	1936.	1937.	1936.	1937.	1936.	1937.
	tons.	tons.	tons.	tons.	tons.	tons.
Prince Edward Island......	226,138	228,947	20,345	6,076	246,483	235,023
Nova Scotia................	5,769,873	6,268,098	564,372	652,344	6,334,245	6,920,442
New Brunswick............	1,641,684	2,320,469	1,237,343	1,485,827	2,879,027	3,806,296
Quebec.....................	6,637,175	8,366,855	4,831,509	4,737,813	11,468,684	13,104,668
Ontario.....................	21,580,190	25,444,531	15,992,631	15,227,256	37,572,821	40,671,787
Manitoba....................	3,824,358	3,858,167	325,766	257,869	4,150,124	4,116,036
Saskatchewan..............	3,452,747	3,651,560	268,312	304,631	3,721,059	3,956,191
Alberta......................	2,595,458	2,627,411	4,452	4,513	2,599,910	2,631,924
British Columbia...........	2,756,833	3,590,005	2,961,826	1,731,342	5,718,659	5,321,347
Totals..........	**48,484,456**	**56,356,043**	**26,206,556**	**24,407,671**	**74,691,012**	**80,763,714**

[1] The freight originating and that terminating will not agree because that which originates within a certain year does not all terminate within the same year. On the other hand, some which terminated in 1936, for instance, originated within the previous year.

Section 2.—The Grain Trade.

Subsection 1.—Governmental Agencies Regulating or Co-operating with the Grain Trade.

The agencies exercising control of the grain trade in Canada are: the Board of Grain Commissioners, which administers the provisions of the Canada Grain Act, 1912; and the Canadian Wheat Board, which operates under the Canadian Wheat Board Act, 1935.

THE BOARD OF GRAIN COMMISSIONERS.

This Board was established in 1912 under the authority of the Canada Grain Act (c. 27, 1912). It assumed functions in regulation of the grain trade which were formerly carried out under the Manitoba Grain Act and the Inspection and Sale Act. The Board consists of a Chief Commissioner and not more than two other Commissioners, appointed by the Governor in Council for periods of ten years. The chief offices of the Board are located in Winnipeg.

The Board is responsible for the administration of the provisions of the Canada Grain Act and its functions relate to: the grading and weighing of grain; deductions from grain for dockage; shortages appearing upon the delivery of grain into or out of any elevator; the unfair or discriminatory operation of any elevator; the deterioration of grain during storage or treatment; and any other provisions of the Act, or regulations made or licences granted thereunder.

The Canada Grain Act.—The Canada Year Book, 1922-23, contained on pp. 581-583 a historical summary of the more important points respecting the shipment, inspection, and sale of Canadian grain under the Canada Grain Act, and an outline of the Canada Grain Act of 1925 appeared at p. 1017 of the 1925 Year Book. The 1929 amendments were dealt with at pp. 1047-1048 of the 1930 Year Book, and the Canada Grain Act, 1930, at p. 1101 of the 1931 Year Book.

THE CANADIAN WHEAT BOARD.*

The Canadian Wheat Board, now engaged in directing the sale of the 1938 wheat crop, operates under the Canadian Wheat Board Act, which was assented to as a statute of Canada on July 5, 1935. The Wheat Board first began to function in the autumn of that year. It could hardly be termed a sudden departure from previous methods of grain marketing. There had been government boards in operation during the War and immediately thereafter, and, even more recently, the Dominion Government had been active in the wheat market through the so-called stabilization measures of the period, 1931-35.

ORIGIN OF THE BOARD.

War and Post-War Boards.—It became evident in June, 1917, that the open market could not operate at the same time as centralized buying on behalf of the Allied Governments. Such buying had, in fact, effectively cornered the Winnipeg market earlier in the year and a commercial settlement had to be made by acceptance of lower grades not usually deliverable on the option. The Canadian Government decided that the distribution and price of Canadian wheat should be controlled to prevent "to the utmost possible extent any undue inflation or depreciation of values by speculation, by the hoarding of grain supplies, or by any other means". Thus, the Board of Grain Supervisors was established by Order in Council on June 11, 1917. It was a monopoly board in that it took over all the wheat produced in Canada and acted as the intermediary between the producers and the Wheat Export Company, buying for the Allied Governments. On the basis of No. 1 Northern at Fort William, the Board paid $2·40 for the balance of the 1916 crop, $2·21 for the 1917 crop and $2·24½ for the 1918 crop. There was no trading in wheat futures on the Winnipeg Grain Exchange from Sept. 1, 1917, to July 21, 1919, while the Board of Grain Supervisors was handling the Canadian wheat crop.

Just ten days after the latter date, the wheat futures market was closed again and the Canadian Wheat Board was appointed by Order in Council of July 31, 1919, to handle the 1919 wheat crop and the remainder of the 1918 crop. This Board was also a monopoly board but it was established for an entirely different reason than that which prompted the establishment of the Board of Grain Supervisors. It has been stated above that the first Board was appointed because the open market was not judged competent to deal with centralized government buying, *i.e.*, buying concentrated in the hands of the Allied Governments' agency. The 1919 Board was appointed because it did not appear that this centralized and organized buying would exist in 1919-20 "nor any open and stable market of the character that obtained prior to the war". There was this further distinction between the two Boards: the Board set up in 1917 paid a fixed and final price to the producer for his wheat; the 1919 Board paid an advance to the producer ($2·15 per bushel, basis No. 1 Northern, Fort William) and gave him participation certificates entitling him to his proportionate share of any surplus above the initial price. These certificates brought two payments totalling 48 cents to raise the complete price to $2·63 per bushel.

Trading in wheat futures was started again in the fall of 1920, but wheat prices suffered in the general price deflation which began soon thereafter. The high prices of the 1917-20 period, however, are associated by many farmers with the method of marketing through Government Boards. This view was expressed to the Royal Grain Inquiry Commission, hearing evidence in Western Canada in 1937, nearly twenty years afterwards.

---

* Prepared by T. W. Grindley, Ph.D., Secretary, The Canadian Wheat Board, Winnipeg, Man.

Efforts to Re-establish a Government Board in 1920-23.—In the early post-War years, wheat prices showed a generally downward tendency and there were various endeavours to re-establish government marketing of wheat. In 1920-21, the yearly average price of No. 1 Northern wheat at Fort William-Port Arthur was \$1·99, in 1921-22 \$1·30, in 1922-23 \$1·10, and in 1923-24 \$1·07. As the price fell, the agitation for a Wheat Board was intensified. The debates of the Dominion Parliament and of the Provincial Legislatures of the Prairie Provinces during this period bear testimony to the interest of the western producers in methods of marketing.

An Act was passed during the 1920 session that provided for the continuance of the Wheat Board but later in the year (July 16) the Government announced that, with the change in buying conditions, the Board would not operate in 1920-21. Prices fell throughout the crop year and those farmers who sold immediately after threshing secured a better price than would have been secured by a Board that distributed its sales throughout the year on a falling market.

The agrarian agitation for a Board persisted and there was much discussion as to the power of the Dominion Government to control the grain trade, except in times of emergency such as those under which the previous Boards had operated. In 1922, the Dominion Government passed enabling legislation setting up a Canadian Wheat Board but it called for similar and concurrent legislation in at least two of the three Prairie Provinces. This legislation was passed in Saskatchewan and Alberta but it was defeated in Manitoba. The other two provinces decided to proceed, but failed in their efforts to secure competent men for the Board. The scheme was then dropped for the time being. The Report of the Royal Grain Inquiry Commission, 1938 (p. 64), comments on this decision as follows:—

> It seems probable that the final abandonment of the movement for a Board was brought about partly by the recognition of the fact that the need of government control and the conditions which had enabled the 1919 Board to obtain high prices were products of the war and had virtually disappeared.

Interest Turns to Co-operative Marketing.—When it was announced in June, 1923, that competent men could not be secured for the Government Board, attention was then turned to the possibility of co-operative marketing. The Alberta Coöperative Wheat Producers, Ltd., began handling and merchandising wheat for its members in the fall of 1923, followed by the Saskatchewan and Manitoba Pool organizations and the Canadian Co-operative Wheat Producers, Ltd., in 1924. The latter was the Central Selling Agency of the three Provincial Pools. Voluntary co-operation was thus substituted for a legislative set-up.

These producers' co-operatives operated on a large scale, handled the farmers' grain on a pooling basis through contracts, acquired their own country and terminal elevators, and were an important feature of wheat marketing during the period, 1923-30. Generally speaking, the Pools did not 'hedge' their wheat and, since they were handling about half the western wheat crop, the open market was not called upon to absorb the full hedging pressure during this period.

Governments Participate Again.—The difficulties of the Pools began with the failure to sell their share of the huge crop of 1928 and were aggravated by the fall of prices late in 1929 coupled with difficult sales conditions. The trend back to government participation began when the three Provincial Governments came to the rescue of the Pools with financial guarantees. In February, 1930, the banks were guaranteed against loss on the Pools' share of the 1929 crop and the balance of the 1928 crop. The total deficit of the Pools on account of all grains was $24,300,000 and their annual repayment obligations to the Provincial Governments with respect to both principal and interest have been met as they fell due.

It should be mentioned here that difficulties with wheat about this time were by no means confined to Canada. The year 1929-30 saw the real beginning of government participation in the wheat business on a world-wide scale. Exporting countries were trying to assist their producers to dispose of surpluses at reasonable prices while importing countries endeavoured to insulate their producers against the full effects of low international price levels. In both cases, the measures adopted had to be made more drastic as prices fell.

Stabilization.—When the Pools ran into further troubles with falling prices and limited demand in 1930-31, the Dominion Government was again brought into the wheat-marketing picture. Its advent was marked by the appointment of Mr. John I. McFarland as Manager of the Pools' Central Selling Agency and by the giving of Dominion Government guarantees to the banks. The second step was the initiation of market stabilization measures which in essence amounted to holding of cash grain and purchasing of futures at times when such seemed necessary to 'stabilize' the market. These were carried on by the Central Selling Agency, financed by the lending banks and guaranteed by the Dominion Government. These operations were, of course, unusual and patterned to meet emergency conditions. They were quite different to the previous duties of the Central Selling Agency and so in July, 1931, the Provincial Pools were divorced from Central and each operated a small separate voluntary pool for the next four years. Direct interest in the Pools, therefore, ends with their separation from Central, but the reader must be concerned with the transition of the government stabilization proceedings into the Canadian Wheat Board of 1935. These proceedings were carried on, as has been seen, under the name of the Canadian Co-operative Wheat Producers, Ltd., and using the accumulated wheat stocks of that organization as a base.

The following statement summarizes the holdings (cash wheat and futures) of the Canadian Co-operative Wheat Producers, Ltd., at selected and significant dates:—

HOLDINGS OF THE CANADIAN CO-OPERATIVE WHEAT PRODUCERS, LTD., AT STATED DATES.

Date.	Bushels.	Date.	Bushels.
November, 1930	36,935,000	July 31, 1934	176,237,000
July 31, 1931	75,164,000	July 31, 1935	213,688,000
July 31, 1932	99,978,000	Dec. 2, 1935	205,187,000
July 31, 1933	149,672,000		

Without entering into any discussion of the merits or demerits of these stabilization measures, it may be seen that a considerable volume of wheat was acquired in the process. Large sums of money were naturally involved and in the 1935 session of Parliament attention was directed to legislation which would serve the double purpose of disposing of the holdings acquired under stabilization and at the same time handling the new crops.

From this résumé of the recent history of grain marketing in Canada it seems fair to conclude that the Canadian Wheat Board Act, 1935, was not a radical or new move in marketing method but merely a natural development from the past, of which the stabilization measures were a transition phase.

The Canadian Wheat Board Act, 1935.

Genesis of the Canadian Wheat Board Act, 1935.—A resolution indicating the intention of the Government to introduce a Wheat Board Bill was tabled in the Canadian House of Commons on Mar. 4, 1935. The Bill itself was introduced on June 10 and then referred to a Special Committee of the House, whose hearings began on June 18. The Bill referred to the Committee granted monopoly power to the Board to handle all wheat produced in Western Canada, but when it was reported back to the House in amended form on July 2 a voluntary Wheat Board was provided for, with certain more drastic and compulsory clauses that could be brought into effect upon proclamation of the Governor in Council. The Act was assented to on July 5, 1935.

Scope of the Act.—The Canadian Wheat Board Act, 1935, is a very complete piece of legislation and contains unusual powers. Apart from Sections 9, 10, 11, and 16 of the Act, the legislation provides for a voluntary marketing organization to purchase wheat from farmers at a fixed price and to issue participation certificates which entitle the producers delivering to the Board to receive a share of any profits realized by the Board. The farmer can exercise his own judgment as to whether he delivers to the Board or not. If at any time the open market price falls below the fixed price established by the Board, then it goes without saying that the Board will receive practically all the wheat offered by farmers. If, on the other hand, the market price is higher than the fixed price, then it is a matter of choice with the farmer as to where he shall sell his wheat.

The four sections mentioned (9, 10, 11, and 16) have not been proclaimed but it might be interesting here to note how drastically they would change the present set-up.

Under Section 9, the Board could control all grain elevators licensed under the Canada Grain Act. These elevators could be operated by the Board or by agents of the Board. Under Section 10, the Board could control the transportation of wheat to or from any elevator. Under Section 11, inspecting officers of the Board of Grain Commissioners shall refuse to issue a grade certificate for wheat stored in any elevator operating in contravention of the Canadian Wheat Board Act. Sections 9, 10, and 11, if brought into effect, would establish the Canadian Wheat Board as an absolute monopoly in dealing with the primary movement of wheat. The power for these clauses is derived from the fact of Dominion control over elevators and railways as works for the general advantage of Canada. Section 16 provides penalties for any person who commits a breach of Sections 9, 10, and 11.

Marketing Policy as Defined by the Act.—There are three paragraphs of the Canadian Wheat Board Act, 1935, that refer to marketing policy. These are as follows:—

> Section 8, paragraph *(b)*, states that it shall be the duty of the Board "to sell and dispose of from time to time all wheat which the Board may acquire, for such price as it may consider reasonable, with the object of promoting the sale and use of Canadian wheat in world markets".

> Section 8, paragraph *(c)*, states that it shall be the duty of the Board "to sell and dispose of stocks of wheat and contracts for the delivery of wheat acquired from Canadian Co-operative Wheat Producers, Limited, and the wheat represented by such contracts as may be reasonably possible, having regard to economic and other conditions".
>
> Section 8, paragraph *(j)*, states that it shall be the duty of the Board "to offer continuously wheat for sale in the markets of the world through the established channels: Provided that the Board may, if in its opinion any existing agencies are not operating satisfactorily, take such steps as it deems expedient to establish, utilize and employ its own or other marketing agencies or channels".

Relation to Established Trade.—Under Section 8, paragraph *(i)* of the Canadian Wheat Board Act, it is the duty of the Board "in selling and disposing of wheat as by this Act provided, to utilize and employ without discrimination such marketing agencies, including commission merchants, brokers, elevator men, exporters and other persons engaged in or operating facilities for the selling and handling of wheat, as the Board in its discretion may determine".

It is interesting to note that the Board must utilize existing marketing agencies, but if any such agencies are not operating satisfactorily the Board may use its own or other agencies to carry on its marketing activities. In general, the Board has used all the facilities of the organized trade in its operations. The Board has signed agreements with country and terminal elevators, mills, and other grain-handling organizations.

Relation to Government.—The Canadian Wheat Board is required to report to the Minister of Trade and Commerce for Canada on a weekly basis, showing its purchases and sales, wheat and contracts on hand, cost of same to the Board, and the general financial position of the Board. Under this clause the Government is assured of continuous information on the activities of the Board.

Relation to Futures Market.—It is also of interest to note Section 8, paragraph *(k)*, which reads as follows:—

> It shall be the duty of the Board, with the approval of the Governor-in-Council, to make such investigations as from time to time it may deem necessary of the operations of the Winnipeg Grain and Produce Clearing Association and the Winnipeg and Vancouver Grain Exchanges in their dealings in wheat and other grains where such wheat and other grains are the subject of transactions affecting interprovincial or international trade, and for the purpose aforesaid the Board shall have, without the issue of any commission, all the power and authority conferred upon a commissioner appointed under the Inquiries Act, being chapter ninety-nine of the Revised Statutes of Canada, 1927, and shall from time to time report to the Minister the result of such investigations.

This section would enable the Board to conduct investigations into the matter of futures trading. In practice, the Board makes full use of the facilities of the Winnipeg Grain Exchange for the disposal of its holdings. It is convenient and necessary for the Board to do so because the Exchange is almost invariably used by the trade in initiating and hedging sales or purchases of the actual cash wheat.

The Handling of Other Grains.—The Board may, with the approval of Governor in Council, apply the terms of the Canadian Wheat Board Act, 1935, to oats, barley, flax, and rye. So far the Board has not taken the initiative in applying the terms of the Act to the secondary crops in Canada.

Financial Arrangements.—The Act provides that the Board may borrow money on the security of wheat and that in its relation with the chartered banks the Minister of Finance may guarantee bank loans of the Board.

Real Purpose of Legislation.—There is no doubt that the intent of the Canadian Wheat Board Act, 1935, was to protect the Canadian producer against untimely developments in the international wheat situation. In actual fact the Canadian Wheat Board, through its power to fix a minimum price, through its power to receive Dominion financing, and through its power to transfer deficits to the Dominion Government, really acts as a buffer between chaotic conditions in the international wheat market and the farmers on the land in Western Canada.

Under this legislation the burden of international conditions as affecting wheat does not fall entirely upon the producer of wheat but is shared between the producer and the country at large.

THE BOARD IN 1935-36.

Appointment of Board and Advisory Committee.—The Canadian Wheat Board was appointed on Aug. 14, 1935, and comprised Mr. John I. McFarland as Chief Commissioner, Mr. D. L. Smith as Assistant Chief Commissioner, and Dr. H. C. Grant as Commissioner. An Advisory Committee was also appointed under Section 6 of the Act, with the following members: Robert McKee, of Vancouver, B.C.; Lew Hutchinson, of Duhamel, Alta.; L. C. Brouillette, of Regina, Sask.; Brooks Catton, of Hanley, Sask.; Sidney T. Smith, of Winnipeg, Man.; Paul F. Bredt, of Kemnay, Man.; C. H. G. Short, of Montreal, Que.

The first meetings of this Advisory Committee were held on Aug. 27, 28, and 29, 1935.

Minimum Prices.—The minimum price for No. 1 Northern wheat was announced on Sept. 6 at 87½ cents per bushel basis No. 1 Northern at Fort William-Port Arthur. Prior to the announcement, the market had closed at 85¾ cents for No. 1 Northern but on the following day, Sept. 7, the market closed at 89 cents. The market price for No. 1 Northern remained above the minimum until Oct. 26 when it fell below for the first time. Apart from a couple of days in late November (the 23rd and 25th) when the market price was above the minimum, market prices were then slightly below the minimum for about eight months. In May, 1936, prices were at their lowest level of the crop year, No. 1 Northern closing at 73⅝ on the 26th. There was a recovery in June and on July 3, the market price of No. 1 Northern again went above 87½ cents and remained above for the remainder of the year, closing on July 31 at $1·03⅜.

While the market price was above the fixed minimum price for nearly two months during the period of heavy deliveries, the Board was not at all certain how much of the farmers' wheat it would get. Its selling policy was consequently restricted. After the end of October when the market was below the fixed prices, practically all the farmers' wheat was delivered to the Board and the situation was much clearer.

On Sept. 17, the minimum prices for all the other grades, except "Feed", were fixed. The price of "Feed" was set on Sept. 23.

The Basis of Minimum Prices.—A digression is necessary here to consider some of the factors which might influence the level of the fixed minimum price. The Act itself gives no clue to the factors which should be considered, merely saying [Section 8 *(a)*] that it shall be the duty of the Board to fix a price to be paid to the producers for wheat delivered to the Board, subject to the approval of the Governor in Council. While the Wheat Board legislation is in effect, it guarantees a minimum price to farmers under an optional marketing plan. The setting of a minimum price is one of the most interesting phases of the Canadian wheat situation; it has many economic, and also social and political, implications. The Board must exercise careful judgment in carrying out this section of the Act, because once the fixed minimum price is established it cannot be changed until the end of the crop year. The Board must forecast conditions nearly twelve months in advance. If the price established is too low it has little significance to the farmer, and if the price is established too high it becomes a burden upon the Dominion treasury. The fixed price also has a close relation to farmers' wheat deliveries. While, theoretically, the farmer may sell his wheat wherever he wishes, self-interest will direct deliveries to the Board if the open market is below the fixed minimum price. If the open market is above the minimum price, the farmer will naturally weigh the advantages of selling at the open-market price or taking the fixed minimum price and speculating on the value which may eventually lie in the participation certificates.

There are several bases upon which the Board could fix the price:—

1. It could be a price considered possible of attainment through sales on the market.

2. It could be a price that would enable the farmer: *(a)* to 'get by', *(b)* to cover production costs, or *(c)* to make a profit.

3. It could be a price calculated to compensate roughly for the farmers' burden through protection of Canadian industries or one that would avoid large governmental expenditures for direct relief.

It is probable that no one of these bases is transcendent at the time of price-fixing and it is also probable that different considerations rule in different years, when the fundamental conditions change so drastically.

In looking back upon the 1935 price, it seems reasonable to suppose that the price was based upon the concept of fair market value—a reasonable interpretation of what was considered possible of attainment by sales during the crop year. It proved to be somewhat optimistic, as we shall see later, but was fairly close in such a complex situation. If the 1935 price carried any relationship to a price which would permit the western farmer to continue in business or to get his costs of production, such a relationship was incidental and unintentional.

It should be pointed out here that the fixed price is on a Fort William basis for the top grade. It is not the average price nor what the farmer obtains at the elevator. On a high quality crop, the average farmer centrally located probably receives about 20 cents less per bushel than the fixed price for No. 1 Northern, basis Fort William. On a poor quality crop, like the rust-devastated harvest of

1935, the same spread might be 25 or even 30 cents below the fixed price. The minimum prices established in 1935 and 1938 do not look so generous from this point of view. Farmers with low yields or low quality have not enough to live on.

The Two-Price System.—The fixed price under the Act is purely a domestic price, that is, the price that the Board is willing to pay producers for wheat. It should be noted that it is paid to producers only, that the Board is restricted to purchasing wheat from producers. Thus when wheat has been sold by a producer through other channels, there is no way in which it can be re-delivered to the Board.

There is no necessary relationship between the domestic fixed price and the price at which the Board sells to shippers or exporters. The Board has a free hand in matters of price but must follow the general selling policy set out in the Act. Naturally, the Board will be anxious to make as good a showing as possible and will obtain the highest possible competitive price for its sales. The primary responsibility of the Board, however, is to sell wheat, *i.e.*, to offer it continuously. If a deficit is incurred in such operations, it is by the Government.

Early Operations of 1935-36.—It has been described how the Board consisting of Messrs. McFarland, Smith, and Grant was appointed on Aug. 14, 1935. The market price of wheat remained above the fixed minimum price for six or seven weeks after the latter was set. Despite this, however, there were considerable deliveries to the Board. The Board had plenty of wheat to sell because, in addition to the incoming wheat, it had the cash wheat and futures of the Canadian Co-operative Wheat Producers, Ltd., which it was required to take over and dispose of under Sections 7 *(f)* and 8 *(c)* of the Act.

Although sales on the futures market were made in advance, the Board actually began its operations on Sept. 25, when it commenced to take delivery of wheat. There was naturally some uncertainty as to how much wheat would be directed to the Board as long as the market prices remained above the minimum prices. As soon as the market fell below, deliveries quickened and then all the marketings were directed to the Board's account. The Board finally received 150,700,000 bushels out of total country marketings in the crop year amounting to 216,300,000 bushels.

Change in Personnel of Board.—On Dec. 3, 1935, the personnel of the Board was changed, the new members being Mr. J. R. Murray, Chief Commissioner, Mr. George H. McIvor, Assistant Chief Commissioner and Dean A. M. Shaw, Commissioner. The services of the Advisory Board were dispensed with, it being considered that this body was unnecessary under a voluntary Wheat Board. The sales policy of the Board was adapted to conform with a statement of the Hon. W. D. Euler, M.P., Minister of Trade and Commerce, issued on Dec. 4. This statement read as follows:—

> The concentration of surplus stocks of wheat in Canada during the past few years has created an abnormal situation in the world wheat trade.
>
> Last June this situation was recognized by Parliament as not being in the interests of Canada or her wheat producers, and the Dominion Government desires to have our surplus restored to a normal basis. To accomplish this the Wheat Board will seek the good will and co-operation of the grain and milling trades in all importing countries.
>
> It is not necessary to have and there will not be any 'fire sale' of Canadian wheat, but it will be for sale at competitive values and will not be held at exorbitant premiums over other wheats.

Later Operations of 1935-36.—The Board proceeded to obtain first-hand information on the overseas situation. Mr. Cecil Lamont was sent to the United Kingdom and the Continent in this regard and also to inform the overseas traders with respect to the Board's policy. In May, 1936, Mr. McIvor; Mr. H. Cockfield of the advertising firm of Cockfield, Brown and Company; and Dr. W. F. Geddes, Chemist of the Board of Grain Commissioners, were sent overseas with the main object of seeing what could be done to promote the use of Canadian wheat. As a result, Mr. R. V. Biddulph was appointed as European Commissioner of the Board in October. Mr. Biddulph's headquarters are in London, England, and he has since been working with the Board and with Canadian advertising agents in advertising Canadian wheat, particularly among the millers and bakers.

In addition, the Secretary of the Board, Mr. C. B. Davidson, made an analysis of the trade between wheat importing and exporting countries. These data and a report by Dr. Geddes were presented in evidence before the Royal Grain Inquiry Commission.

It was the policy of the Board to divide wheat sales during 1935-36 in such a way that the 1935-36 crop would be sold before the end of the crop year, if possible, and that any wheat or contracts carried over would be those of the old wheat taken over from the Canadian Co-operative Wheat Producers, Ltd.

At the end of July, 1936, the position of the Board was as follows:—

(*a*) The amount of the 1935 wheat crop on hand was 2,030,761 bushels.

(*b*) Of the holdings of the Canadian Co-operative Wheat Producers, Ltd., the remaining amount was 82,667,891 bushels.

The total holdings of the Board were thus reduced from 295,376,167 bushels at the end of November, 1935, to 84,698,652 bushels on July 31, 1936. While the world movement of wheat during the crop year was at a very low level, Canada was able to secure a large proportion of the small trade partly because of crop failures in Argentina and the United States. Toward the end of the crop year demand was also quickened as the 1936 crops of North America were ravaged by drought.

When the final accounting on the 1935 crop was made after the last sales in November, 1936, the loss on the Board's operations was fixed at $11,858,104·18. Naturally then, the participation certificates distributed to the producers were valueless.

THE BOARD IN 1936-37.

It has been seen that the Board carried 84,698,652 bushels of wheat and contracts into the new crop year. With short crops in both Canada and the United States and an improved demand, prices rose fairly steadily throughout the crop year and, from the 1936-37 Report of the Board, it is seen that most of the old wheat holdings of the Canadian Co-operative Wheat Producers, Ltd., were disposed of at a net profit of $9,628,881·31. At July 31, 1937, the remainder of this wheat amounted to 6,964,000 bushels of futures contracts which were being held against seed requirements for the 1938 crop. The latter procedure was necessary because of the particularly destructive drought in Saskatchewan in 1937.

In April, 1936, the 1930 Wheat Crop Equalization Payments Act was passed by the Dominion Parliament. This Act provided $6,521,026·16 to allow the Provincial

Pools to equalize payments to their members at 60 cents per bushel, basis No. 1 Northern at Fort William, on wheat delivered to the 1930-31 Pool.

With regard to the handling of the 1936 wheat crop, it was announced by the Government on Aug. 28, 1936, that the price of 87½ cents a bushel for No. 1 Northern, at Fort William or Vancouver, fixed by the Board on July 29, 1936, but subject to the approval of the Governor in Council [Section 8 *(a)* of the Act], was approved but would only become effective if the closing market price for No. 1 Northern wheat in store Fort William fell below 90 cents per bushel. Prior to this announcement, that is, in the period from Aug. 1 to 28, producers delivered 617,655 bushels to the Board. Given the opportunity of taking the wheat back or settling at the open market, the producers took back 559,664 bushels while 57,991 bushels were settled for at the market price. In the latter process and for various incidentals, the Board incurred a loss of $49,574·88.

During the crop year 1936-37, the closing market price for No. 1 Northern wheat did not fall below 90 cents and therefore the Wheat Board did not accept wheat of the 1936 crop. This was handled by the grain trade, and the Board was concerned mainly with the disposal of its remaining supplies and with continuation of the overseas promotional work on behalf of Canadian wheat. The disposal of the old wheat was not allowed to interfere with the marketing of the small 1936 crop. Most of the sales were made in the period November, 1936, to June, 1937.

In July, 1937, Mr. J. R. Murray resigned as Chief Commissioner and was succeeded by Mr. George H. McIvor. Mr. R. C. Findlay became Assistant Chief Commissioner and Dean A. M. Shaw continued as Commissioner.

The carryover of Canadian wheat was down to a mere 32,937,991 bushels by July 31, 1937, and with another poor crop in sight, the problems engendered by large unsold stocks of wheat were at least temporarily solved.

The Board in 1937-38.

As in the previous year, the Board fixed a price of 87½ cents per bushel for No. 1 Northern wheat at Fort William, but this was approved conditionally by the Governor in Council. The condition, as in 1936-37, was that the fixed price would not become effective unless the closing market price for No. 1 Northern fell below 90 cents on a Fort William basis. The price stayed above this level so that the Board did not receive deliveries of the 1937 crop.

The Board exchanged its futures contracts, amounting to 6,964,000 bushels, for cash wheat suitable for seed and in the spring of 1938 superintended the distribution of this seed to needy farmers whose 1937 crops had been spoiled by drought. The Board also undertook the purchase and sale of oats and barley for relief feed and seed purposes on behalf of several Provincial Governments.

The 1937 wheat crop was even smaller than that of 1936 and was, in fact, the lowest since 1914. It was handled through the ordinary channels of the grain trade. By the end of the crop year, the carryover of wheat in Canada was down to 23,411,171 bushels.

The Board in 1938-39.

There was a sharp change in the wheat situation evident during the first six months of 1938. Prices fell sharply from the peak of January, 1938, with particularly large declines in May and July. While Canada ended the crop year at July 31, 1938, with a very small carryover, other countries, and particularly the United States, were not so fortunate. A large acreage and good yields brought surplus conditions back to that country in 1937-38. World demand for wheat continued at a very low level. New crop conditions in the Northern Hemisphere were promising, and the United States acreage was at a record level. After five successive years of poor crops, the crop of Western Canada of 1938 survived the threats of rust and drought damage to give a near-average return. At the beginning of the new crop year there was every indication that 1938-39 would be a year of abundant supplies, continued low demand, and low prices.

With many of these adverse factors already in evidence, the Royal Grain Inquiry Commission (Mr. Justice Turgeon) had reported to the Government on May 4 as follows:—

> For all these reasons (and notwithstanding the adverse considerations to which I have referred in relation to government Boards) I do not feel that I can suggest the immediate dissolution of the Canadian Wheat Board. There is a strong possibility that conditions may develop which will require a measure of assistance in the marketing of the coming crop, and I do not know, of course, how long these conditions may continue after the final chapter of this report is written. In the meantime I can think of nothing better to suggest than that the Board be maintained to meet any situation which may arise.

Under the circumstances outlined above, the Government announced on Aug. 4 that the minimum price of 80 cents a bushel for No. 1 Northern wheat at Fort William, fixed by the Board, had been approved. The Wheat Board was again to be actively concerned with the marketing of the crop of Western Canada.

On Aug. 16, the fixed minimum prices for other grades, except Mixed Wheats, were announced. The prices of Mixed Wheats and certain odd grades were announced on Sept. 14.

On Aug. 31, it was announced that Mr. W. Charles Folliott had been appointed to replace Dean A. M. Shaw, who had retired, as the third member of the Board.

From the first, there was little doubt as to the extent to which farmers' deliveries would come to the Board. The market prices were below the fixed minimum prices and, naturally, the farmers patronized the Board. It seems fair to assume that practically all the 1938 wheat crop of the Prairie Provinces will be marketed through the Wheat Board. The only uncertainty in this regard arose during the political crisis of September, which was largely responsible for an increase of prices from the low of the October future of 56⅞ cents on Sept. 6 and 7 to the high of 69⅛ cents at the market opening, Sept. 28. There was some belief at this time that the market would continue to rise, reach the level of the fixed price, and thus divert remaining marketable supplies to the open market. With the settlement of the Czechoslovakian dispute by the Munich Agreement of Sept. 29, this possibility was dispelled. Most of the increased price arose from higher freight and insurance rates although at times there was spirited bidding for nearby supplies. When the immediate danger of war passed, prices gradually fell to the pre-crisis levels.

Early appraisals of the difficulties in the world wheat situation have been amply borne out. The world wheat crop, excluding Russia and China, is now estimated at 4,445,000,000 bushels. The European crop exceeded the previous record year, 1928. The total United States production is given as 930,801,000 bushels, added to a healthy carryover from the previous year. The Canadian crop at 350,010,000 bushels is the largest since 1932. There is a ray of hope in the Australian crop reduced from 188,018,000 bushels in 1937-38 to current forecasts of 135 to 145 million bushels. Unfortunately this decrease is more than offset by the increase in Argentina from 184,799,000 bushels last year to the first official prediction of about 316,000,000 bushels for 1938-39.

The large crops and resultant exports from the Balkans, particularly Roumania, have been upsetting. These surpluses move mostly on a barter basis, often arranged for political rather than economic reasons. Being a cheap, low-quality wheat it has more effect on price levels than would be suggested by the quantities moved. The same can be said for Russian wheat which moved in quantity in the early part of the crop year. Working under a variable subsidy program, United States wheat has also been promoting uncertainty. Traders have had several painful experiences in buying ahead this year and with policies so subject to change, buying on a hand-to-mouth basis will probably rule during the crop season.

The world movement of wheat, so far this crop year, has been higher than in the same period of 1937-38 but still very low compared with the recent average and with exportable supplies. In 1938-39 Canada had supplies of about 271 million bushels for export or carryover, and authorities have been estimating exports at 125 to 160 million bushels. The movement to date has been well up to the latter figure which would leave a carryover of over 100 million bushels at July 31, 1939.

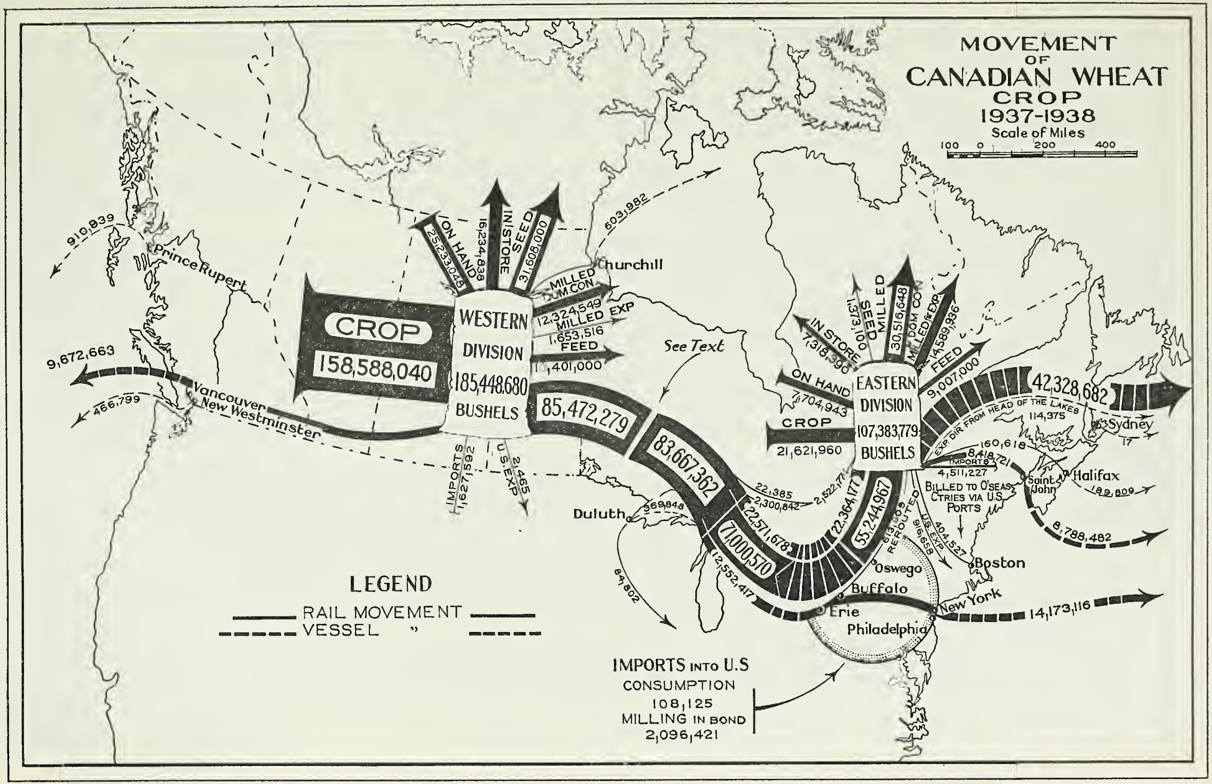
The method of wheat marketing in Canada at present is a combination of the various procedures that have been tried since the War. The Canadian Wheat Board pays a fixed minimum price for wheat and issues participation certificates to producers. The elevator companies handle the wheat for the Board and deliver it at terminal points under the terms of a handling agreement and periodic shipping instructions. The Pools do not operate as they did in 1924-30 but their elevators handle wheat for their patrons. The Board in effect operates on a pooling principle and, working under Government guarantees, pays a higher initial price than the Pools could safely undertake to pay. The shippers and exporters perform their usual functions, buying from the Board at terminals and shipping forward or overseas. The Winnipeg Grain Exchange is open and is used by the Board and the trade in transactions necessary to the purchase, sale, and movement of Canadian wheat. Doubtless there will be other changes in marketing as procedures are adapted to meet the changing wheat situation, so the foregoing is merely one chapter in a continued story. The record is merely brought up to February, 1939.

Subsection 2.—Movement of Canadian Wheat, Crop Year 1937-38.*

A résumé of the movement begins with a description of the crop of the Western Inspection Division. The wheat crop of 1937 marketed in the Western Division during the crop year from Aug. 1, 1937, to July 31, 1938, amounted to 158·5 million bushels. A carryover of 25·2 million bushels from the previous crop year, and an import of 1·7 million bushels, brought the stock of the Western Division to a total for the year of 185·4 million bushels. As for distribution, 111·6 million bushels were commercially disposed of, the chief items of which were 20·2 million bushels exported to the United Kingdom and 73·5 million bushels shipped to the Eastern Division. The direct exports to the United States were 886 thousand bushels and to other countries 2·9 million bushels. The total shipments from the Western Division were thus 97·6 million bushels. The wheat used by the milling companies for the manufacture of flour amounted to about 13·9 million bushels of which 12·3 million bushels were ground into flour for domestic consumption. The all-rail movement eastward from the Western Division, including shipments to the

---

* Revised in the Agricultural Branch, Dominion Bureau of Statistics.



MOVEMENT OF CANADIAN WHEAT CROP 1937-1938

Scale of Miles
100 0 200 400
WESTERN DIVISION 185,448,680 BUSHELS
CROP 158,588,040
ON HAND 25,233,048
IN STORE 16,234,838
SEED 31,608,000
MILLED DOM.CON. 12,324,549
MILLED EXP 1,653,516
FEED 1[illegible],401,000
IMPORTS 1,627,592
U.S. EXP 2,465
85,472,279
83,667,362
See Text
603,982
Churchill
910,839
Prince Rupert
9,672,663
466,799
Vancouver
New Westminster
Duluth
369,848
84,802
22,385
2,300,842
2,522,77
22,571,678
71,000,570
12,552,417
22,364,177
55,244,967
EASTERN DIVISION 107,383,779 BUSHELS
CROP 21,621,960
ON HAND 7,704,943
IN STORE 7,318,390
SEED 1,373,100
MILLED DOM CON 30,516,648
MILLED EXP. 14,589,936
FEED 9,007,000
42,328,682
EXP. DIR. FROM HEAD OF THE LAKES
114,375
Sydney
17
160,618
8,418,721
IMPORTS
4,511,227
BILLED TO O'SEAS CTRIES VIA U.S. PORTS
Saint John
Halifax
189,809
8,788,482
613,[illegible]09 REROUTED
916,658 U.S. EXP.
404,527
Boston
Oswego
Buffalo
Erie
Philadelphia
New York
14,173,116
IMPORTS INTO U.S
CONSUMPTION 108,125
MILLING IN BOND 2,096,421
LEGEND
RAIL MOVEMENT
VESSEL "

Ogilvie Flour Mills Co. at Fort William for grindings, was 2,360·7 thousand bushels. Lake shipments from Fort William and Port Arthur were 83·6 million bushels, 71·0 million bushels going to Canadian ports and 12·5 million to United States ports. The principal Canadian lake ports were those of lake Huron and Georgian bay, with receipts of 18·4 million bushels, and Port Colborne with 15·0 million bushels. Among the United States lake ports, Buffalo was of chief importance in the handling of Canadian wheat, with receipts by water from Port Arthur and Fort William of 11·1 million bushels. The export of wheat through Vancouver was only 9·6 million bushels, as compared with 31·7 million in the previous crop year; 911 thousand bushels were exported through Prince Rupert, 467 thousand through New Westminster, and 604 thousand from Churchill. The seed requirements were estimated at 31·6 million bushels, feed for live stock and poultry at 10·4 million bushels, and the stocks at the end of the crop year were 16·2 million bushels.

The Eastern Division received during the crop year not only the eastern crop, estimated at 21·6 million bushels, but also shipments from the West aggregating 73·5 million bushels. The quantity on hand at the beginning of the crop year was 7·7 million bushels, making, with an importation of 4·5, a total stock entering the Eastern Division of 107·3 million bushels. The distribution included 7·3 million bushels carried over in store into the following year, 42·3 million bushels exported from the St. Lawrence ports, and 8·9 million bushels shipped through the winter ports of Saint John and Halifax, while 916 thousand bushels moved over the Border into the United States for consumption. In addition, 11·9 million bushels were cleared for export to the United Kingdom and other countries *via* the United States Atlantic ports. The chief ports concerned with the movement of Canadian grain from both Divisions were New York, Albany, Boston, and Portland.

Total exports from Canada to the United States for consumption amounted to 1·8 million bushels, to the United Kingdom 55·4 million bushels, to other countries 19·4 million bushels; 63·5 million bushels were shown to be shipped *via* Canadian ports and 11·3 million bushels *via* United States ports, after deducting 614 thousand bushels transhipped from Buffalo to Montreal and adding the same to the Canadian movement. Total exports during the crop year amounted to 76·7 million bushels.

Table 2 shows the apparent home consumption of wheat in relation to population from 1868 to 1937, inclusive, and indicates imports and exports in relation to production over the period.

Table 3 gives a summary of the distribution of Canadian grain for the crop year ended July, 1938.

Table 4 shows, for the licence years 1937 and 1938, the number of elevators and their total storage capacity, the figures being given by provinces for each class of elevator, with a summary showing the total of all elevators for each province. The growth of Canadian elevators in number and capacity has accompanied the expansion of grain acreage in the present century. Canadian elevators in 1901 numbered 426 with a capacity of 18,329,352 bushels; in 1911, 1,909 elevators and 105,462,700 bushels; and in 1921, 3,855 elevators and 231,213,620 bushels. There were in 1938, a total of 5,845 elevators with a capacity of 423,063,420 bushels.

Table 5 gives a summary of the inspections of grain, 1935-38. Detailed statistics may be found in the Reports on the Grain Trade of Canada,* Tables 6 and 7 show the shipments of grain by vessel and rail for 1937 and 1938 and Tables 8 and 9 deal with the Canadian grain handled in recent years at Eastern elevators.

---

* The latest report is for the crop year ended July 31, 1937, and may be obtained from the Dominion Statistician.

2.—Production, Imports, Exports, and Home Consumption of Wheat in Relation to Population in Canada, 1868-1937.

NOTE.—Figures set in italics are estimates.

Year.	Production.	Imports.[1]			Exports.[1]			Apparent Home Consumption.[3]	Estimated Population.
		Wheat.	Wheat Flour.	Wheat and Flour.[2]	Wheat.	Wheat Flour.	Wheat and Flour.[2]		
	'000 bu.	bu.	bbl.	bu.	bu.	bbl.	bu.	'000 bu.	'000
1868..	*22,156*	3,591,948	349,248	5,163,564	2,809,208	375,219	4,497,694	*22,822*	3,511
1869..	*22,578*	4,402,773	326.387	5,871,515	3,557,101	382,177	5.276,898	*23,173*	3,565
1870..	*16,724*	4,201,657	392,843	5,969,451	1,748,977	306,339	3,127.503	*23,563*	3,625
1875..	*26,093*	5,855,656	376,114	7,548,169	6,070.393	415,504	7,940,161	*25,701*	3,954
1880..	32,350[4]	76,652	197,581	965,767	2,523,673	439,728	4,502,449	28,813	4,255
1881..	38,000	345,909	172,517	1,122,236	3,845,035	469,739	5,958,861	33,163	4,325
1882..	47,752	44,097	264,956	1,236,399	5,867,458	489,046	8,068,165	40,920	4,375
1883..	30,841	298,660	531,188	2,689,006	745,526	197,389	1,633,777	31,896	4,430
1884..	45,363	373,101	540,108	2,803,587	2,340,956	123,777	2,897,953	45,269	4,487
1885..	42,736	66,084	201,327	972,056	3,419,168	386,099	5,156,614	38,551	4,537
1886..	38,225	22,540	169,629	785,871	5,631,726	520,213	7,972,685	31,038	4,580
1887..	38,954	12,042	62,482	293,211	2,163,754	350,115	3,739,272	35,508	4,626
1888..	32,965	15,167	258,813	1,179,826	490,905	131,181	1,081,220	33,064	4,678
1889..	30,792	188,934	169,869	953,345	422,274	115,099	940,220	30,805	4,729
1890..	42,223[4]	147,521	57,489	406,222	2,108,216	296,784	3,443,744	39,185	4,779
1891..	60,721	66,113	36,559	230,629	8,714,154	380,996	10,428,636	50,523	4,833
1892..	48,182	9,069	34,507	164,351	9,271,885	410,185	11,117,718	37,229	4,883
1893..	41,347	60,773	32,506	207,050	9,272,208	428,610	11,200,953	30,353	4,931
1894..	43,221	499,720	47,883	715,194	8,825,689	222,975	9,829,077	34,107	4,979
1895..	55,703	142,131	41,436	328,593	9,919,542	186,716	10,759,764	45,272	5,026
1896..	39,570	83,589	26,377	202,286	7,855,274	421,758	9,753,185	30,019	5,074
1897..	54,418	58,045	35,587	218,187	18,963,107	1,249,438	24,585,578	30,051	5,122
1898..	66,495	35,546	57,745	295,399	10,305,470	792,536	13,871,882	52,919	5,175
1899..	59,912	27,262	50,659	255,228	16,844,650	768,162	20,301,379	39,866	5,235
1900..	55,572[4]	104,782	46,638	314,653	9,739,758	1,118,700	14,773,908	41,113	5,301
1901..	88,337	148,326	47,143	360,470	26,117,530	1,086,648	31,007,446	57,690	5,371
1902..	97,073	84,931	35,247	243,543	32,985,745	1,287,766	38,780,692	58,536	5,494
1903..	81,888	37,171	40,849	220,992	16,779,028	1,587,600	23,923,228	58,186	5,651
1904..	71,838	92,406	42,397	283,193	14.700,315	1,321,469	20,646,926	51,474	5,827
1905..	107,033	64,927	41,912	253,531	40,399,402	1,532,014	47,293,465	59,993	6,002
1906..	135,602	35,251	44,072	233,575	39,434,658	1,562,491	46,465,868	89,370	6,097
1907..	93,131	104,267	44,194	303,140	40,077,950	1,667,903	47,583,514	45,851	6,411
1908..	112,434	28,186	33,489	178,887	47,696,065	2,008,349	56,733,636	55,879	6,625
1909..	166,744	73,078	30,273	209,307	52,623,887	3,374,268	67,808,093	99,145	6,800
1910..	132,078[4]	107,903	66,608	407,639	48,442,780	3,101,185	62,398,113	70,088	6,988
1911..	231,237	140,626	52,191	375,486	78,786,889	4,180,892	97,600,903	134,012	7,207
1912..	224,159	619,031	60,079	889,387	95,510,826	4,496,299	115,744,172	109,304	7,389
1913..	231,717	129,823	50,632	357,667	114,902,121	4,596,739	135,587,447	96,487	7,632
1914..	161,280	1,964,466	47,905	2,180,039	63,901,874	5,077,389	86,750,125	76,710	7,879
1915..	393,543	131,308	38,638	305,179	235,738,776	7,426,437	269,157,743	124,690	7,981
1916..	262,781	86,043	48,531	304,433	140,223,819	7,631,429	174,565,250	88,520	8,001
1917..	233,743	183,639	21,693	281,258	118,579,601	11,257,942	169,240,340	64,784	8,060
1918..	189,075	290,891	6,815	321,559	55,921,319	9,119,796	96,960,401	92,436	8,148
1919..	193,260	115,420	19,186	201,757	63,450,123	6,455,429	92,499,554	100,962	8,311
1920..	226,508[4]	304,642	33.357	454,749	136,968,832	6,721,469	167,215,443	59,747	8,556
1921..	300,858	193,234	39,935	372,942	150,935,359	7,740,960	185,769,679	108,759[3]	8,788
1922..	399,786	93,571	67,544	397,519	229,849,410	11,003,460	279,364,980	129,719	8,919
1923..	474,199	40,772	88,882	440,741	292,425,153	12,021,424	346,521,561	94,650	9,010
1924..	262,097	352,923	61,660	630,393	146,958,158	10,169,692	192,721,772	87,451	9,143
1925..	395,475	154,963	49,829	379,194	275,557,078	10,896,654	324,592,021	62,501	9,294
1926..	407,136	139,486	59,474	407,119	251,265,788	9,247,824	292,880,996	100,191[3]	9,451
1927..	479,665	148,904	72,410	474,749	288,567,390	9,865,754	332,963,283	120,172	9,637
1928..	566,726	994,922	77,991	1,345,881	354,424,699	11,808,775	407,564,187	133,805	9,835
1929..	304,520	1,003,998	82,384	1,374,726	155,766,106	6,778,023	186,267,210	111,943	10,029
1930..	420,672	131,608	25,025	244,221	228,536,403	6,701,663	258,693,887	139,487	10,208
1931..	321,325	123,524	20,623	216,328	182,803,382	5,383,594	207,029,555	117,560	10,376
1932..	443,061	51,320	27,043	173,014	240,136,568	5,370,613	264,304,327	99,123	10,506
1933..	281,892	10,676	89,442	413,165	170,234,013	5,454,636	194,779,875	104,518	10,681
1934..	275,849	2,794	198,640	896,674	144,374,910	4,750,310	165,751,305	101,583	10,824
1935..	281,935	15,111	61,422	291,510	232,019,649	4,978,917	254,424,775	121,702	10,935
1936..	219,218	146,959	56,986	403,396	174,858,160	4,525,665	195,223,653	99,542	11,028
1937..	182,410	5,743,998	87,738	6,138,819	76,713,595	3,609,656	92,957,047	105,904	11,120

---

[1] Years ended June 30, 1869 to 1905, and July 31, 1906 to 1938. [2] Wheat flour has been converted into bushels of wheat at the average rate of 4½ bushels to the barrel of 196 lb. of flour. [3] In calculating the apparent home consumption, stocks of wheat on hand at July 31 have been included since 1921 and stocks of wheat flour since 1926. The consumption figures for these years are not, therefore, strictly comparable with the figures for the earlier years, for which data on carryover stocks are not available. [4] From records of the decennial census.

3.—Summary of the Distribution of Canadian Grain, crop year ended July 31, 1938.

Item.	Wheat.	Oats.	Barley.	Flax.	Rye.
	bu.	bu.	bu.	bu.	bu.
1. On Hand, Aug. 1, 1937—					
In farmers' hands	3,999,300	15,231,000	1,476,400	9,800	78,400
In Eastern elevators	5,980,927	395,986	341,030	2,115	5,394
In flour-mills and mill elevators, Western Division	3,991,401	681,487	778,092	30,269	5,170
In interior terminals, Western Division	34,539	39,240	3,633	Nil	Nil
In Vancouver and New Westminster elevators	3,414,592	79,363	8,001	418	1,227
In Victoria and Prince Rupert elevators	911,340	Nil	Nil	Nil	Nil
In Churchill elevator	614,569	"	"	"	"
In country and private terminals, Western Division	3,401,452	674,703	189,064	82,527	65,598
In public and private terminals, Fort William and Port Arthur	6,811,752	508,913	958,743	312,154	98,544
In Eastern Division—afloat	2,275,436	338,598	509,970	24,776	133,058
In flour-mills, Eastern Division	968,732	202,420	40,674	66	1,878
In transit	533,951	114,333	10,092	2,842	19,595
Totals on Hand	32,937,991	18,266,043	4,315,699	464,967	408,864
2. Crops, 1937	180,210,000	268,442,000	83,124,000	774,600	5,771,000
3. Shipped in from U.S.A. and other countries	6,138,819	11,818,111	3,151	1,116,374	63,220
4. Totals, Annual Stocks (Sums of 1, 2, and 3)	219,286,810	298,526,154	87,442,850	2,355,941	6,243,084
5. Shipped Out to—					
U.S.A.	1,802,502	10,376	557,742	178	20,299
United Kingdom	55,443,863	3,599,627	13,223,955	15,908	138,681
Other countries	19,467,230	1,166,566	962,591	56	489,322
Totals Shipped Out	76,713,595	4,776,569	14,744,288	16,142	648,302
6. Milled—					
For domestic consumption	42,841,197	8,028,509	1,277,453	1,870,697	81,915
For export	16,243,452	3,796,321	Nil	Nil	1,557
Consumed in malting and brewing establishments	Nil	Nil	6,139,001	"	Nil
7. Totals Disposed of Commercially (Sums of 5 and 6)	135,798,244	16,601,399	22,160,742	1,886,839	731,774
8. Feed for live stock and poultry	19,408,000	Nil	Nil	Nil	Nil
9. Used for seed	32,981,100	32,524,250	8,907,800	110,600	1,112,100
10. In Store, July 31, 1938—					
In farmers' hands	5,061,000	16,120,000	3,177,500	1,800	78,000
In Eastern elevators	4,626,499	533,647	860,741	2,115	226,191
In Eastern Division—afloat	1,630,537	273,745	135,428	20,370	Nil
In flour-mills and mill elevators, Western Division	1,642,481	521,725	794,244	31,587	12,442
In interior terminals, Western Division	9,078	1,653	1,261	Nil	Nil
In Vancouver and New Westminster elevators	79,074	54,087	89,528	32	11,090
In Victoria and Prince Rupert elevators	Nil	Nil	Nil	Nil	Nil
In Churchill elevator	11,820	"	"	"	"
In country and private terminals, Western Division	1,166,971	448,689	308,530	26,093	52,537
In public and private terminals, Fort William and Port Arthur	7,501,303	1,012,610	936,389	134,035	592,750
In transit	789,861	89,848	109,475	2,610	3,040
In flour-mills, Eastern Division	1,034,604	442,649	217,838	385	9,526
Totals in Store	23,553,228	19,498,653	6,630,934	219,027	985,576

3.—Summary of the Distribution of Canadian Grain, crop year ended July 31, 1938—concluded.

Item.	Wheat.	Oats.	Barley.	Flax.	Rye.
	bu.	bu.	bu.	bu.	bu.
11. Totals accounted for (sums of 7, 8, 9, and 10)	211,740,572	68,624,302	37,699,476	2,216,466	2,829,450
12. Losses in cleaning	3,100,000	217,000	253,000	27,000	7,900
13. Grain, not merchantable	1,658,300	9,147,000	1,118,300	4,900	50,700
14. Balances, merchantable grain fed on farms or otherwise consumed in, or moved out of, Canada through other channels.	2,787,938	220,537,852	48,372,074	107,575	3,355,034
15. Totals (Sums of 11 to 14)	219,286,810	298,526,154	87,442,850	2,355,941	6,243,084
16. Amounts inspected	119,102,429	25,233,980	26,056,612	358,100	1,445,731
17. Percentages inspected	65·29	9·40	31·35	51·33	25·05
18. Percentages of commercial grain inspected (line 16 of 11)	55·88	36·77	69·12	15·27	51·10
19. Commercial grain from season's crop (10 and 7—1—3)	120,274,662	6,015,898	24,472,826	524,525	1,245,266
20. Percentages of crop commercial grain (line 19 of 2)	67·02	2·24	29·44	67·72	21·58
21. Values of crop $	184,651,000	114,093,000	42,020,000	1,148,000	4,152,000

4.—Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1937 and 1938.

Note.—Detailed statistics of elevators for the years 1901 to 1918 are given in the 1921 Year Book, pp. 507–509, and the figures for later years will be found in successive Year Books.

Division, Elevator, and Province.	1937.		1938.	
	Elevators.	Capacity.	Elevators.	Capacity.
	No.	bu.	No.	bu.
Western Division.				
Country Elevators—				
Ontario	1	40,000	2	45,000
Manitoba	705	22,343,650	697	22,214,950
Saskatchewan	3,222	100,850,850	3,216	100,723,850
Alberta	1,756	65,268,000	1,753	65,309,500
British Columbia	14	485,000	15	530,000
Totals, Country Elevators	5,698	188,987,500	5,683	188,823,300
Private Country Elevators—				
Manitoba	4	105,000	4	108,000
Saskatchewan	3	90,000	5	150,000
Alberta	4	180,000	3	170,000
Totals, Private Country Elevators	11	375,000	12	428,000
Mill Elevators—				
Ontario	1	180,000	2	190,000
Manitoba	4	152,500	4	152,500
Saskatchewan	9	148,000	11	222,000
Alberta	3	63,000	3	63,000
British Columbia	15	451,110	15	466,110
Totals, Mill Elevators	32	994,610	35	1,093,610
Private Terminal Elevators—				
Ontario	6	1,890,000	6	1,890,000
Manitoba	11	4,254,000	12	5,249,000
Saskatchewan	5	4,410,500	6	9,910,500
Alberta	15	4,610,000	15	4,610,000
British Columbia	4	630,000	4	780,000
Totals, Private Terminals	41	15,794,500	43	22,439,500

4.—Numbers and Storage Capacities of Canadian Grain Elevators, licence years 1937 and 1938—concluded.

Division, Elevator, and Province.	1937.		1938.	
	Elevators.	Capacity.	Elevators.	Capacity.
	No.	bu.	No.	bu.
Western Division—concluded.				
Public Terminal Elevators—				
Saskatchewan	2	11,000,000	1	5,500 000
Alberta	3	6,250,000	3	6,100,000
British Columbia	1	1,715,000	1	4,335,000
Totals, Public Terminals	6	18,965,000	5	15,935,000
Semi-Public Terminal Elevators—				
Ontario	26	91,167,210	27	92,567,210
Manitoba	2	3,500,000	1	2,500,000
Alberta	Nil	–	Nil	–
British Columbia	9	19,158,000	9	16,613,000
Totals, Semi-Public Terminals	37	113,825,210	37	111,680,210
Totals, Western Division	**5,825**	**338,941,820**	**5,815**	**340,399,620**
Eastern Division.				
Eastern Elevators—				
Nova Scotia	1	2,200,000	1	2,200,000
New Brunswick	3	3,076,800	3	3,076,800
Quebec	9	25,537,000	9	25,537,000
Ontario	18	52,100,000	17	51,850,000
Totals, Eastern Division	**31**	**82,913,800**	**30**	**82,663,800**
Summary by Provinces.				
Nova Scotia	1	2,200,000	1	2,200,000
New Brunswick	3	3,076,800	3	3,076,800
Quebec	9	25,537,000	9	25,537,000
Ontario	52	145,377,210	54	146,542,210
Manitoba	726	30,355,150	718	30,224,450
Saskatchewan	3,241	116,499,350	3,239	116,506,350
Alberta	1,781	76,371,000	1,777	76,252,500
British Columbia	43	22,439,110	44	22,724,110
Grand Totals for Canada	**5,856**	**421,855,620**	**5,845**	**423,063,420**

5.—Quantities of Canadian Grain Inspected, crop years ended July 31, 1935-38.

Grain.	1934-35.			1935-36.		
	Western Division.	Eastern Division.	Total.	Western Division.	Eastern Division.	Total.
	bu.	bu.	bu.	bu.	bu.	bu.
Spring wheat	231,027,500	25,000	231,052,500	217,620.910	375,243	217.996,153
Winter wheat	502,500	113,000	615,500	519,090	1,290,817	1,809,907
Totals, Wheat	231,530,000	138,000	231,668,000	218,140,000	1,666,060	219,806,060
Oats	28,195,000	1,247,453	29,442,453	25,008,500	2,411,027	27,419,527
Barley	14,840,000	1,092,292	15,932,292	14,745,000	337,900	15,082,900
Flax	429,000	Nil	429,000	880.000	Nil	880.000
Rye	1,021,500	4,000	1,025,500	1,958,500	12,000	1,970,500
Corn	Nil	86,400	86,400	9,600	474,000	483,600
Buckwheat	"	428,325	428,325	Nil	280,280	280,280
Sample Grain	"	Nil	Nil	"	37,732	37,732
Mixed grain	132,500	216,304	348,804	91,000	115,172	206,272
Totals, Grain	**276,148,000**	**3,212,774**	**279,360,774**	**260,832,600**	**5,331,171**	**266,166,771**

5.—Quantities of Canadian Grain Inspected, crop years ended July 31, 1935-38—concluded.

Grain.	1936-37.			1937-38.		
	Western Division.	Eastern Division.	Total.	Western Division.	Eastern Division.	Total.
	bu.	bu.	bu.	bu.	bu.	bu.
Spring wheat	182,102,040	Nil	182,102,040	117,916,797	Nil	117,916,797
Winter wheat	110,960	581,450	692,410	203,203	982,429	1,185,632
Totals, Wheat	182,213,000	581,450	182,794,450	118,120,000	982,429	119,102,429
Oats	24,302,000	551,767	24,853,767	24,944,000	289,980	25,233,980
Barley	21,849,360	810,395	22,659,755	25,796,000	260,612	26,056,612
Flax	1,331,400	Nil	1,331,400	358,100	Nil	358,100
Rye	2,255,900	3,000	2,258,900	1,409,600	36,131	1,445,731
Corn	1,000	119,250	120,250	60,000	116,000	176,000
Buckwheat	1,000	107,629	108,629	Nil	276,643	276,643
Mixed grain	239,480	16,700	256,180	143,100	51,250	194,350
Totals, Grain	**232,193,140**	**2,190,191**	**234,383,331**	**170,830,800**	**2,013,045**	**172,843,845**

6.—Shipments of Grain by Vessels from Fort William and Port Arthur, navigation seasons 1937 and 1938.

Grain.		1937.			1938.		
		To Canadian Ports.	To U.S. Ports.	Total Shipments.	To Canadian Ports.	To U.S. Ports.	Total Shipments.
Wheat	bu.	75,228,159	13,724,564	89,230,891[1]	112,031,214	19,087,280	131,230,560[2]
Oats	"	5,938,343	Nil	5,938,343	8,812,031	Nil	8,812,031
Barley	"	13,079,796	3,040,588	16,120,384	15,068,104	1,555,450	16,623,554
Flaxseed	"	401,417	Nil	401,417	608,926	Nil	608,926
Rye	"	1,536,721	142,520	1,679,241	1,086,696	280,445	1,477,141[2]
Totals	"	**96,184,436**	**16,907,672**	**113,370,276**[1]	**137,606,971**	**20,923,175**	**158,752,212**[2]
Screenings	ton.	7,090	26,037	33,127	35,777	35,840	71,617
Mixed feed (oats groats)	"	150	Nil	150	103	Nil	103
Barley malt	lb.	16,387,800	"	16,387,800	24,067,800	"	24,067,800

[1] Includes 278,168 bushels of wheat exported direct to Europe. [2] Includes 112,066 and 110,000 bushels of wheat and rye, respectively, exported direct to Europe.

7.—Shipments of Grain by Lake and All-Rail Routes from Fort William and Port Arthur, crop years ended July 31, 1937 and 1938.

Grain.	1936-37.			1937-38.		
	Lake.	Rail.	Total.	Lake.	Rail.	Total.
	bu.	bu.	bu.	bu.	bu.	bu.
Wheat—						
No. 1 Hard	2,559,778	5,000	2,564,778	313,280	4,529	317,809
No. 1 Northern	72,209,800	228,387	72,438,187	17,307,423	894,343	18,201,766
No. 2 Northern	19,026,153	68,022	19,094,175	13,473,489	709,734	14,183,223
No. 3 Northern	16,986,885	316,991	17,303,876	22,568,812	314,756	22,883,568
No. 4	9,498,117	12,817	9,510,934	7,547,213	90,130	7,637,343
Other grades	21,549,636	550,484	22,100,120	21,442,847	364,205	21,807,052
Totals, Wheat	**141,830,369**	**1,181,701**	**143,012,070**	**82,653,064**	**2,377,697**	**85,030,761**
Other Grain—						
Oats	10,194,982	2,353,453	12,548,435	5,015,323	2,487,422	7,502,745
Barley	18,545,591	196,830	18,742,421	16,958,563	265,066	17,223,629
Flaxseed	619,248	176,050	795,298	336,144	29,430	365,574
Rye	3,501,236	9	3,501,245	778,985	62,015	841,000
Mixed grain[1]	5,108	63,160	68,268	754	27,033	27,787
Totals, Other Grain	**32,866,165**	**2,789,502**	**35,655,667**	**23,089,769**	**2,870,966**	**25,960,735**

[1] Mixed grain in bushels of 50 lb.

8.—Canadian Grain Handled at Eastern Elevators, crop years ended July 31, 1930-38.

NOTE.—Figures for the crop years 1922 to 1929 are shown at p. 626 of the 1931 edition of the Year Book.

Year.	Wheat.	Oats.	Barley.	Flaxseed.	Rye.	Total Grain.
	bu.	bu.	bu.	bu.	bu.	bu.
Receipts and Carryover—						
1929-30	132,356,863	15,932,469	8,381,291	658,303	3,226,137	160,555,063
1930-31	178,120,479	20,874,442	37,555,371	1,710,059	6,226,473	244,486,824
1931-32	151,395,023	17,063,934	17,109,737	1,012,939	15,210,866	201,792,499
1932-33	233,419,639	17,367,890	7,797,343	1,116,223	3,921,887	263,622,982
1933-34[1]	164,248,854	17,949.649	7,496,255	631,973	837,076	191,163,807
1934-35[1]	116,415,429	10,851,457	10,045,694	485,990	933,244	138,731,814
1935-36[1]	164,427,961	20,967,752	14,403,239	582,309	2,033,088	202,414,349
1936-37[1]	161,828,565	12,273,485	6,247,592	586,734	2,444,583	183,380,959
1937-38[1]	118,582,130	7,496,487	27,610,593	482,529	1,400,923	155,572,662
Shipments—						
1929-30	111,077,966	13,372,999	6,734,676	657,101	1,654,237	133,496,979
1930-31	163,730,581	19,086,592	36,485,055	1,693,439	4,378,874	225,374,541
1931-32	133,610,498	15,706,287	16,807,097	974,649	13,738,895	180,837,426
1932-33	200,254,656	15,662,256	6,929,791	1,027,504	2,836,333	226,710,540
1933-34	166,952,408	16,824,993	6,325,712	720,692	1,204,467	192,028,272
1934-35	105,273,843	13,027,608	11,047,771	485,990	1,306,106	131,141,318
1935-36	184,120,242	19,563,798	14,652,637	582,309	2,103,700	221,022,686
1936-37	178,492,948	13,159,516	6,724,438	586,734	2,811,294	201,774,930
1937-38	119,884,101	7,358,685	27,090,701	482,529	1,180,127	155,996,143

[1] Receipts only.

9.—Canadian Grain Handled at Eastern Elevators, by Classes of Ports, crop year ended July 31, 1938.

Ports.	Wheat.	Oats.	Barley.	Flaxseed.	Rye.	Total.[1]
	bu.	bu.	bu.	bu.	bu.	bu.
Lake Huron and Georgian Bay Ports—						
Receipts— Water	22,670,792	1,323,527	3,094,436	114,298	141,568	27,344,621
Rail	322,040	3,388	10,106	Nil	108	335,642
Totals, Receipts	22,992,832	1,326,915	3,104,542	114,298	141,676	27,680,263
Shipments—Water	3,711,332	139,119	561,332	Nil	64,047	4,475,830
Rail	18,652,845	1,177,272	2,525,961	114,298	17,321	22,487,697
Totals, Shipments	22,364,177	1,316,391	3,087,293	114,298	81,368	26,963,527
Lower Lake Ports—						
Receipts— Water	39,933,498	1,079,044	9,972,341	183,513	525,975	51,694,371
Rail	410,833	192,392	240,420	Nil	18,371	862,016
Totals, Receipts	40,344,331	1,271,436	10,212,761	183,513	544,346	52,556,387
Shipments—Water	35,428,838	970,235	8,770,647	133,996	420,282	45,723,998
Rail	5,893,036	442,200	1,329,852	49,517	93,179	7,807,784
Totals, Shipments	41,321,874	1,412,435	10,100,499	183,513	513,461	53,531,782
St. Lawrence Ports—						
Receipts— Water	43,120,514	3,754,048	12,076,209	184,718	667,817	59,803,306
Rail	3,545,114	833,214	363,143	Nil	7,999	4,749,470
Totals, Receipts	46,665,628	4,587,262	12,439,352	184,718	675,816	64,552,776
Shipments—Water	42,587,148	2,849,062	10,315,877	Nil	526,889	56,278,976
Rail	4,737,573	1,469,923	1,733,094	184,718	19,324	8,144,632
Totals, Shipments	47,324,721	4,318,985	12,048,971	184,718	546,213	64,423,608
Maritime Ports—						
Receipts— Water	Nil	Nil	Nil	Nil	Nil	Nil
Rail	8,579,339	310,874	1,853,938	"	39,085	10,783,236
Totals, Receipts	8,579,339	310,874	1,853,938	"	39,085	10,783,236
Shipments—Water	8,872,679	299,524	1,851,439	"	39,085	11,062,727
Rail	650	11,350	2,499	"	Nil	14,499
Totals, Shipments	8,873,329	310,874	1,853,938	"	39,085	11,077,226

[1] Exclusive of minor quantities of Canadian corn, buckwheat, mixed grain, and soya beans.

Flour Milling in 1937.—The flour- and feed-milling industry in Canada in 1937 showed a decrease of 32 mills of all classes from 1936, and capacity of flour mills was increased by 15 barrels of flour a day from the 1936 figure. Capital investment was $56,280,032. The mills were distributed by provinces as shown in the statement appearing in the Manufactures Chapter at p. 391. Statistics of the employees, value of products, etc., for both flour and feed mills, for the latest year available, will be found in Table 9 of the chapter on Manufactures, pp. 377-442 of this volume.

Section 3.—Marketing of Live Stock and Live-Stock Products.*

The estimated value of farm animals sold for meat in Canada in 1937 was $140,989,000. In addition, the 1937 wool production was worth $2,972,000 and the farm value of poultry and eggs produced was $51,766,000. Live stock makes a very important contribution to farmers' income and also provides the basis for a large slaughtering and meat-packing industry in Canada. Since the War the slaughtering and meat-packing industry has been one of the most important single manufacturing industries in Canada.

---

* Revised by the Agricultural Branch, Dominion Bureau of Statistics. For more detailed information on this subject, see: Canada Year Book, 1922-23, pp. 594-595; Live Stock and Animal Products Statistics, published annually by the Dominion Bureau of Statistics; and the Annual Market Review, published annually by the Live Stock Branch of the Dominion Department of Agriculture. Statistics of live stock and poultry are given at pp. 215 to 218 of this volume.

10.—Animals in Canada, Animals Killed or Sold by Farmers, and Wool Produced, census years 1871-1931.

Year.	Animals in Canada.			Animals Killed or Sold.			Wool Produced.
	Cattle.[1]	Sheep.	Swine.	Cattle.	Sheep.	Swine.	
	No.	No.	No.	No.	No.	No.	lb.
1871	2,484,655	3,155,509	1,366,083	507,725	1,557,430	1,216,097	11,103,480
1881	3,382,396	3,048,678	1,207,619	657,681	1,496,465	1,302,503	11,300,736
1891	3,997,023	2,563,781	1,733,850	957,737	1,464,172	1,791,104	10,031,970
1901	5,576,451	2,510,239	2,353,828	1,110,209	1,329,141	2,497,636	10,657,597
1911[2]	6,526,083	2,174,300	3,634,778	1,752,792[3]	949,039[3]	2,771,755[3]	6,933,955
1921[2]	8,519,484	3,203,966	3,404,730	2,097,390	1,217,987	2,972,331	11,338,268
1931[2]	8,099,883	3,627,116	4,774,828	2,046,428	1,296,158	3,578,189	12,794,634

[1] Figures for 1871-91 do not include work oxen. [2] Census taken as of June 1, while previous censuses were taken in April, so that the proportion of young animals is greater than for years previous to 1911. [3] Animals slaughtered on farms were not included. The following figures are comparable with data given for other years, the amounts being partly estimated: cattle, 1,915,059; sheep, 1,097,015; swine, 4,282,624.

In Table **11** indexes are given showing the numbers of animals on farms for the years 1921 to 1938, expressed as percentages of the average numbers on farms during the period 1921 to 1925.

11.—Index Numbers of Animals on Farms in Canada, calendar years 1921-38.

(Average number for 1921-25=100.)

Year.	Horses.	Milk Cows.	Other Cattle.	Sheep.	Swine.
1921	105·1	99·9	110·6	121·4	88·9
1922	100·6	100·2	102·2	107·8	90·3
1923	97·3	97·8	95·5	91·0	101·6
1924	98·9	99·7	98·0	88·7	117·0
1925	98·0	102·5	93·7	91·0	102·1
1926	93·7	102·7	80·9	103·8	100·6
1927	94·3	103·8	90·1	107·8	108·3
1928	93·1	101·1	85·3	112·9	103·8
1929	93·1	98·5	87·9	120·1	101·1
1930	90·8	98·5	89·8	122·1	92·3
1931	85·8	90·2	78·7	119·8	108·4
1932	85·2	96·1	84·1	120·4	107·0
1933	82·3	98·8	88·6	111·9	87·7
1934	80·9	103·3	87·0	113·0	84·3
1935	80·8	102·9	85·0	112·3	81·9
1936	79·7	103·9	84·7	109·9	95·6
1937	79·5	105·4	83·8	110·3	91·4
1938	77·8	103·6	79·3	112·8	80·4

Live-Stock Marketings, 1937.—The numbers of cattle and calves sold at stockyards showed increases in 1937 as compared with 1936, while hogs, and sheep and lambs showed decreases. Cattle sold numbered 999,332 in 1937 and 885,477 in 1936, calves 544,428 and 450,955, hogs 1,037,788 and 1,044,207, and sheep and lambs 395,957 and 401,862, respectively.

Table 12 shows the receipts for sale at the various stockyards and a partial disposition of the live stock sold in 1936 and 1937.

12.—Total Receipts of Live Stock and Disposition of Slaughter and Store Stock at Principal Markets in Canada, calendar years 1936 and 1937.

Market and Item.	1936.				1937.			
	Cattle.	Calves.	Hogs.	Sheep and Lambs.	Cattle.	Calves.	Hogs.	Sheep and Lambs.
	No.	No.	No.	No.	No.	No.	No.	No.
Toronto—								
Receipts (total)	311,054	125,121	229,277	174,489	341,512	143,610	242,110	170,414
Shipments—								
1. Slaughter stock to packers	186,717	48,123	219,288	131,088	192,498	45,512	238,273	132,664
2. Slaughter stock to butchers	36,199	32,986	6,425	36,675	30,275	33,790	4,121	31,181
3. Store stock to country points	55,367	9,017	Nil	Nil	104,253	16,817	Nil	Nil
Montreal (Pt. St. Charles)—								
Receipts (total)	64,004	121,476	230,802	99,809	62,784	130,722	245,634	101,352
Shipments—								
1. Slaughter stock to packers	42,508	65,426	135,253	76,513	40,518	79,077	143,726	74,890
2. Slaughter stock to butchers	20,728	55,531	96,276	23,650	21,843	49,896	104,331	29,475
3. Store stock to country points	175	149	Nil	Nil	1,070	13	Nil	Nil
Montreal (East End)—								
Receipts (total)	10,889	27,575	40,574	6,281	14,263	25,736	40,776	5,320
Shipments—								
1. Slaughter stock to packers	116	2,798	6,946	419	322	634	3,717	120
2. Slaughter stock to butchers	10,519	24,462	31,652	5,709	9,296	21,650	35,033	4,910
3. Store stock to country points	Nil	Nil	Nil	Nil	3,162	Nil	Nil	Nil
Winnipeg—								
Receipts (total)	307,860	121,457	258,986	62,306	359,182	161,543	248,342	59,225
Shipments—								
1. Slaughter stock to packers	169,899	80,071	201,347	54,185	181,816	97,426	191,191	49,441
2. Slaughter stock to butchers	28,399	21,851	7,401	4,668	34,339	33,718	5,513	3,214
3. Store stock to country points	48,206	2,424	Nil	Nil	56,457	3,383	Nil	Nil
Calgary—								
Receipts (total)	83,242	19,762	83,464	13,322	76,010	25,960	69,667	10,361
Shipments—								
1. Slaughter stock to packers	62,744	[1]	66,890	11,292	61,106	370	55,979	8,948
2. Slaughter stock to butchers	7,170	[1]	507	322	7,604	[1]	952	199
3. Store stock to country points	17,919	Nil	Nil	Nil	19,013	Nil	Nil	Nil
Edmonton—								
Receipts (total)	58,211	16,616	58,566	18,397	71,918	24,020	49,263	16,941
Shipments—								
1. Slaughter stock to packers	27,946	7,107	48,992	13,797	36,014	12,782	43,244	13,438
2. Slaughter stock to butchers	3,007	1,827	1,957	1,873	2,844	1,681	2,080	1,759
3. Store stock to country points	8,715	386	Nil	Nil	17,532	846	Nil	Nil
Prince Albert—								
Receipts (total)	10,908	2,272	32,921	3,466	15,598	3,789	23,143	4,772
Shipments—								
1. Slaughter stock to packers	4,058	1,475	32,393	3,292	7,924	2,984	26,481	4,315
2. Slaughter stock to butchers	309	78	3	10	278	133	9	22
3. Store stock to country points	3,374	354	Nil	Nil	6,365	296	Nil	Nil
Moose Jaw—								
Receipts (total)	15,406	5,824	30,266	15,214	19,292	6,949	25,251	15,227
Shipments—								
1. Slaughter stock to packers	12,300	4,676	26,318	7,904	12,803	6,311	21,277	7,624
2. Slaughter stock to butchers	23	1	Nil	Nil	Nil	Nil	Nil	Nil
3. Store stock to country points	2,189	764	"	"	5,689	555	"	"

---

[1] Included with cattle.

12.—Total Receipts of Live Stock and Disposition of Slaughter and Store Stock at Principal Markets in Canada, calendar years 1936 and 1937—concluded.

Market and Item.	1936.				1937.			
	Cattle.	Calves.	Hogs.	Sheep and Lambs.	Cattle.	Calves.	Hogs.	Sheep and Lambs.
	No.	No.	No.	No.	No.	No.	No.	No.
Saskatoon—								
Receipts (total)	15,859	6,520	51,852	5,990	22,304	11,914	58,206	8,250
Shipments—								
1. Slaughter stock to packers	8,876	5,217	46,671	4,944	12,118	10,368	50,371	7,495
2. Slaughter stock to butchers	3,422	1,521	2,333	645	2,710	1,404	1,894	435
3. Store stock to country points	1,630	55	Nil	Nil	4,622	117	Nil	Nil
Regina—								
Receipts (total)	8,044	4,332	27,499	2,588	16,469	10,185	35,396	4,095
Shipments—								
1. Slaughter stock to packers	4,724	2,424	23,564	1,635	10,590	6,350	27,673	3,237
2. Slaughter stock to butchers	2,206	1,919	1,186	961	2,083	2,320	1,584	756
3. Store stock to country points	596	22	Nil	Nil	1,467	252	Nil	Nil

The interprovincial and export movement of live stock in 1937 showed increases in all classes. Total shipments in 1937 with comparative figures for 1936 in parentheses were as follows: cattle 878,867 (756,512); calves 358,917 (255,991); swine 911,097 (900,185); and sheep 315,553 (262,013).

The marketings of live stock through stockyards, by direct shipment to packers, or by export according to provinces of origin for the calendar year 1937 are given in Table **13.** In Table **14** are given the statistics of the grading of animals from several provinces marketed through the stockyards in 1937 and, in the case of hogs, those marketed direct to packers, since a majority of these animals are handled in this way. Of recent years the practice is developing of grading an increasing proportion of hogs by the carcass after being dressed at the packing plant. Hogs graded by each method are shown separately in Table **14.**

13.—Live Stock from Several Provinces of Canada, Marketed through Stockyards, Packers, etc., calendar year 1937.

Live Stock.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
Cattle—							
Totals to stockyards	91	32,716	278,832	119,305	368,837	203,078	1,002,859
Direct to packers	3,785	10,573	85,942	31,417	65,559	75,299	272,575
Direct for export	3,181	3,282	54,088	891	11,098	33,129	105,669
Totals, Cattle	**7,057**	**46,571**	**418,862**	**151,613**	**445,494**	**311,506**	**1,381,103**
Calves—							
Totals to stockyards	3,547	95,188	179,762	58,158	131,774	58,041	526,470
Direct to packers	6,646	41,657	99,387	42,897	32,383	75,045	298,015
Direct for export	1,368	1,928	23,179	221	1,923	6,154	34,773
Totals, Calves	**11,561**	**138,773**	**302,328**	**101,276**	**166,080**	**139,240**	**859,258**
Hogs—							
Totals to stockyards	3,714	191,120	330,299	101,699	297,444	201,392	1,125,668
Direct to packers	62,756	151,574	1,382,736	153,947	270,749	778,880	2,800,642
Direct for export	7,089	218	45,316	Nil	1,530	5,934	60,087
Totals, Hogs	**73,559**	**342,912**	**1,758,351**	**255,646**	**569,723**	**986,206**	**3,986,397**
Sheep—							
Totals to stockyards	4,417	94,688	149,770	25,832	61,437	62,324	398,468
Direct to packers	11,258	34,758	96,642	57,363	40,534	157,189	397,744
Direct for export	346	65	1,793	1	15	46	2,266
Totals, Sheep	**16,021**	**129,511**	**248,205**	**83,196**	**101,986**	**219,559**	**798,478**
Store cattle purchased	2,916	4,427	202,215	37,132	7,921	20,464	275,075

14.—Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards and Packing Plants, calendar year 1937.

Live Stock and Grade.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
1. Cattle—							
Steers up to 1,050 lb.—							
Choice	71	265	945	1,382	1,947	2,058	6,668
Good	557	605	22,167	5,580	7,766	7,658	44,333
Medium	1,373	1,538	28,929	6,833	11,851	11,211	61,735
Common	392	2,009	19,736	4,832	13,694	15,631	56,294
Steers over 1,050 lb.—							
Choice	Nil	135	7,598	1,327	1,525	3,531	14,116
Good	148	1,713	18,297	2,309	3,117	4,253	29,837
Medium	103	1,227	13,798	1,156	2,302	3,271	21,857
Common	26	527	3,879	364	975	1,487	7,258
Heifers—							
Choice	Nil	70	129	1,858	2,739	3,878	8,674
Good	79	475	18,887	7,360	13,694	11,336	51,831
Medium	149	917	28,607	8,832	24,950	20,039	83,494
Common	62	1,385	20,818	5,945	22,695	23,376	74,281
Fed Calves—							
Choice	Nil	18	9,818	1,991	2,608	2,975	17,410
Good	32	48	11,660	2,712	4,218	1,655	20,325
Medium	31	83	11,573	3,717	5,903	2,306	23,613
Cows—							
Good	82	2,007	22,786	8,888	19,476	22,677	75,916
Medium	224	5,518	24,770	14,067	29,582	20,861	95,022
Common	157	6,187	24,633	8,392	24,699	18,881	82,949
Canners and cutters	55	9,670	38,255	18,451	53,465	18,896	138,792
Bulls—							
Good	67	657	5,271	2,527	4,765	3,422	16,709
Common	245	6,370	12,663	2,858	7,572	4,804	34,512
Stocker and Feeder Steers—							
Good	3	200	4,829	10,997	32,931	20,039	68,999
Common	Nil	343	7,374	14,353	55,764	19,408	97,242
Stock Cows and Heifers—							
Good	"	1	37	3,420	14,593	7,766	25,817
Common	"	Nil	16	2,942	16,907	6,084	25,949
Milkers and springers	20	1,292	5,998	893	977	115	9,295
Unclassified	Nil	29	1,301	6,736	53,681	20,759	82,506
Totals, Cattle	**3,876**	**43,289**	**364,774**	**150,722**	**434,396**	**278,377**	**1,275,434**
2. Calves—							
Veal—							
Good and choice	700	5,751	79,417	46,147	53,641	47,338	232,994
Common and medium	982	88,509	189,582	53,310	99,940	84,603	516,926
Grass	8,511	42,585	10,150	1,598	10,576	1,145	74,565
Totals, Calves	**10,193**	**136,845**	**279,149**	**101,055**	**164,157**	**133,086**	**824,485**
3. Hogs, Graded Alive—							
Select bacon	784	58,876	347,416	39,228	71,886	196,657	714,847
Bacon	2,322	108,062	558,585	85,504	141,673	290,562	1,186,708
Butchers	2,390	56,365	114,249	35,179	95,550	186,697	490,430
Heavies	295	6,401	18,789	5,907	12,702	12,786	56,880
Extra heavies	245	3,977	3,726	2,805	8,033	3,609	22,395
Lights and feeders	1,949	37,447	54,902	48,212	113,698	61,627	317,835
Sows No. 1	566	3,351	5,414	6,287	23,376	13,313	52,307
Sows No. 2	449	5,507	25,988	4,577	12,585	20,334	69,440
Roughs	9	53	2,983	592	1,974	1,664	7,275
Stags	39	411	1,689	546	1,389	1,578	5,652
Totals, Hogs Graded Alive	**9,048**	**280,450**	**1,133,741**	**228,837**	**482,866**	**788,827**	**2,923,769**

14.—Grades of Live Stock from Several Provinces of Canada, Marketed at the Stockyards and Packing Plants, calendar year 1937—concluded.

Live Stock and Grade.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	Total.
	No.	No.	No.	No.	No.	No.	No.
Hog Carcasses—							
"A"	14,280	16,041	201,208	6,598	17,551	56,409	312,087
"B"	28,763	25,801	277,390	12,246	35,651	90,229	470,080
"C"	4,371	5,220	27,454	2,600	11,049	24,905	75,599
"D"	1,215	317	5,600	460	3,238	2,798	13,628
"E"	887	308	7,588	97	1,203	1,495	11,578
Heavies	1,106	1,657	17,401	1,719	2,627	6,978	31,488
Extra heavies	547	914	3,672	514	1,079	1,310	8,036
Lights	4,380	10,921	31,609	1,872	9,633	5,493	63,908
Sows	1,873	1,065	7,372	703	3,296	1,828	16,137
Totals, Hog Carcasses	**57,422**	**62,244**	**579,294**	**26,809**	**85,327**	**191,445**	**1,002,541**
4. Lambs and Sheep—							
Lambs—							
Good handyweights	10,335	73,346	175,719	61,245	51,834	133,927	506,406
Good heavies	1,825	2,886	6,903	2,591	1,929	9,509	25,643
Common, all weights	1,418	14,483	27,484	13,379	20,948	42,279	119,991
Bucks	983	24,508	9,308	875	720	960	37,354
Sheep—							
Good heavies	187	639	3,976	1,362	2,199	2,379	10,742
Good handyweights	568	6,350	12,413	1,871	8,729	16,939	46,870
Common	359	7,234	9,099	1,655	3,579	5,787	27,713
Unclassified	Nil	Nil	1,510	217	12,033	7,733	21,493
Totals, Lambs and Sheep	**15,675**	**129,446**	**246,412**	**83,195**	**101,971**	**219,513**	**796,212**

Slaughtering and Meat Packing.—This industry has become one of the most important branches of manufacturing in Canada. Its growth, shown by the statistics of Table **15**, has been accompanied by a concentration of the major part of the production of the industry into a comparatively small number of large establishments, thereby facilitating the utilization of by-products and greater efficiency of operation. There has been a large increase in the number of establishments since 1931, due to the inclusion of wholesale butchers operating small plants engaged in slaughtering only. The inclusion of these small establishments did not affect materially the value of production of the industry. The numbers of live stock slaughtered at Canadian inspected establishments in 1936 and 1937 are shown in Table **16**.

15.—Principal Statistics of the Slaughtering and Meat-Packing Industry of Canada, decennially 1870-1930, annually 1933-37.

Description.	1870.	1880.	1890.	1900.[1]	1910.[1]	1920.
Establishments.........No.	193	203	528	57	80	86
Capital invested........ $	419,325	1,449,677	2,185,077	5,395,162	15,321,088	84,288,306
Employees.............No.	841	852	1,699	2,416	4,214	11,978
Salaries and wages...... $	145,376	209,483	505,553	1,020,164	2,685,518	16,691,471
Cost of materials....... $	2,942,786	3,163,576	5,556,746	19,520,058	40,951,761	170,916,888
Value of products....... $	3,799,552	4,084,133	7,132,831	22,217,984	48,527,076	240,544,618
	1930.	1933.	1934.	1935.	1936.	1937.
Establishments.........No.	76	135[2]	147[2]	139[2]	142[2]	136[2]
Capital invested........ $	60,778,996	54,590,398	56,765,624	58,207,715	61,806,675	65,411,606
Employees.............No.	9,290	9,289	10,119	10,674	11,776	13,070
Salaries and wages...... $	12,114,667	10,103,744	11,608,338	12,448,347	13,921,410	17,085,008
Cost of materials....... $	129,004,327	70,467,544	98,417,162	108,191,810	126,630,086	148,057,651
Value of products....... $	164,029,953	92,366,137	122,112,406	133,379,312	156,971,640	181,419,311

---

[1] Figures cover establishments employing five hands or over only.
[2] See the text preceding this table.

16.—Live Stock Slaughtered at Canadian Inspected Establishments, by months, 1936 and 1937.

Month.	1936.				1937.			
	Cattle.	Calves.	Sheep.	Hogs.	Cattle.	Calves.	Sheep.	Hogs.
	No.	No.	No.	No.	No.	No.	No.	No.
January	69,810	27,060	48,434	275,775	71,473	28,576	47,823	351,365
February	62,097	29,099	43,398	245,049	58,136	32,089	38,752	334,408
March	61,927	48,588	42,563	262,531	68,202	55,138	46,813	357,883
April	66,816	67,583	32,312	266,855	67,429	81,553	33,779	356,419
May	65,132	71,784	26,094	279,710	61,544	87,971	23,259	328,014
June	67,029	68,946	51,882	269,474	66,526	82,443	44,054	293,541
July	68,439	57,096	67,329	232,254	67,090	69,642	67,364	243,160
August	76,534	52,613	81,251	232,050	80,703	68,823	85,177	213,761
September	89,832	55,404	107,576	284,186	102,731	66,387	117,307	237,492
October	111,665	51,070	168,378	391,890	113,765	55,061	135,918	321,879
November	102,614	39,553	109,040	410,449	100,561	45,724	120,253	388,973
December	78,334	33,820	52,718	412,311	65,801	28,998	61,259	375,246
Totals	**920,229**	**602,616**	**830,975**	**3,562,534**	**923,961**	**702,405**	**821,758**	**3,802,141**

Consumption of Animal Products.—The figures of Table **17** give an indication of the standard of the diet of the people of Canada. Animal products such as meat, butter, and eggs are generally more pronounced in the diet of people with a high standard of living. In Canada there is a relatively high per capita consumption of beef, pork, butter, and eggs but a relatively low per capita consumption of mutton and lamb, and cheese. During the depression years, the per capita consumption of these products was not affected as much as might have been expected. Changes in the per capita consumption of various animal products occur as a result of changes in price relationships. These, in turn, are related to cycles of over- and under-production particularly marked in the case of the meat products of hogs and cattle. Beef and pork, particularly, interchange in leadership as regards the amount consumed, according to the price relationships between them. In 1937, 58·89 pounds of beef were consumed per capita as compared with 62·35 pounds of pork. In 1934, pork consumption was 66·12 pounds per capita and beef consumption 67·87 pounds per capita.

17.—Production, Imports, Exports, and Total and Per Capita[1] Consumption of Meats and Live-Stock Products in Canada, calendar years 1934-38.

Item.	1934.	1935.	1936.	1937.	1938.[2]
Beef and Veal—					
Slaughtered in Canada No.	2,137,492	2,035,698	1,889,731	1,853,528	[3]
Estimated dressed weight lb.	758,809,660	722,672,790	670,854,505	658,002,440	[3]
On hand, Jan. 1 “	16,127,300	25,396,292	24,836,592	28,452,603	[3]
Imports “	196,258	13,959,458	12,179,356	11,786,650	[3]
“	775,133,218	762,028,540	707,870,453	698,241,693	[3]
Exports “	15,092,200	13,512,600	12,416,300	17,265,200	[3]
“	760,041,018	748,515,940	695,454,153	680,976,493	[3]
On hand, Dec. 31 “	25,396,292	24,836,592	28,452,603	26,109,401	[3]
Totals, consumption “	734,644,726	723,679,348	667,001,550	654,867,092	[3]
Consumption per capita “	67·87	66·18	60·48	58·89	[3]
Pork—					
Slaughtered in Canada No.	5,590,673	5,415,289	6,270,565	5,985,945	[3]
Estimated dressed weight lb.	838,600,950	812,293,350	940,584,750	897,891,750	[3]
On hand, Jan. 1 “	24,759,461	28,116,841	30,335,225	49,604,317	[3]
Imports “	4,147,727	430,348	2,877,456	2,068,526	[3]
“	867,508,138	840,840,539	973,797,431	949,564,593	[3]
Exports “	123,750,200	132,435,300	174,492,800	219,141,500	[3]
“	743,757,938	708,405,239	799,304,631	730,423,093	[3]
On hand, Dec. 31 “	28,116,841	30,335,225	49,604,317	37,116,949	[3]
Totals, consumption “	715,641,097	678,070,014	749,700,314	693,306,144	[3]
Consumption per capita “	66·12	62·01	67·98	62·35	[3]

For footnotes, see end of table, p. 595.

17.—Production, Imports, Exports, and Total and Per Capita[1] Consumption of Meats and Live-Stock Products in Canada, calendar years 1934-38—concluded.

Item.	1934.	1935.	1936.	1937.	1938.[2]
Mutton and Lamb—					
Slaughtered in Canada No.	1,708,598	1,696,061	1,660,114	1,667,381	[3]
Estimated dressed weight lb.	68,343,920	67,842,440	66,404,560	66,695,240	[3]
On hand, Jan. 1 “	7,200,802	7,480,457	5,578,415	7,196,840	[3]
Imports “	37,764	83,162	19,079	40,245	[3]
“	75,582,486	75,406,059	72,002,054	73,932,325	[3]
Exports “	378,800	315,500	231,800	283,500	[3]
“	75,203,686	75,090,559	71,770,254	73,648,825	[3]
On hand, Dec. 31 “	7,480,457	5,578,415	7,196,840	5,119,146	[3]
Totals, consumption “	67,723,229	69,512,144	64,573,414	68,529,679	[3]
Consumption per capita “	6·26	6·36	5·86	6·16	[3]
Summary of Per Capita Consumption, All Meats—					
Beef and veal lb.	67·87	66·18	60·48	58·89	[3]
Pork “	66·12	62·01	67·98	62·35	[3]
Mutton and lamb “	6·26	6·36	5·86	6·16	[3]
Totals, Consumption of All Meats Per Capita “	**140·25**	**134·55**	**134·32**	**127·40**	[3]
Butter—					
On hand, Jan. 1 lb.	22,026,655	32,422,719	32,610,519[4]	36,671,543	28,495,201
Production—Creamery “	234,852,961	240,918,799	250,931,777	247,056,746[5]	266,886,900
Home-made “	109,918,000	114,161,999	109,026,000[5]	108,084,000[5]	105,076,000
Imports “	2,873,562	148,541	117,281	65,918	5,231,838
“	369,671,178	387,652,058	392,685,577	391,878,207[5]	405,689,939
Exports “	428,300	7,697,000	5,128,800[5]	4,096,600	3,893,400
“	369,242,878	379,955,058	387,556,777[5]	387,781,607[5]	401,796,539
On hand, Dec. 31 “	32,422,719	32,302,519	36,671,543	28,495,201[5]	44,999,477
Totals, consumption “	336,820,159	347,652,539	350,885,234[5]	359,286,406[5]	356,797,062
Consumption per capita “	31·12	31·79	31·82[5]	32·31[5]	31·83
Cheese—					
On hand, Jan. 1 lb.	15,973,921	17,196,375	24,562,606	24,025,899	28,559,446
Production—Factory “	99,346,617	100,427,390	119,123,483	130,625,838[5]	121,314,600
Home-made “	1,011,300	1,232,148	1,229,300	1,232,300	1,101,300
Imports “	946,401	1,274,130	1.239,882	1,410,336	1,386,645
“	117,278,239	120,130,043	146,155,271	157,294,373[5]	152,361,991
Exports “	61,167,800	55,718,700	81,890,300	88,955,300	80,989,100
“	56,110,439	64,411,433	64,264,971	68,339,073[5]	71,372,891
On hand, Dec. 31 “	17,196,375	24,562,606	24,025,899	28,559,446[5]	30,817,376
Totals, consumption “	38,914,064	39,848,737	40,239,072	39,779,627[5]	40,555,515
Consumption per capita “	3·60	3·64	3·65	3·58[5]	3·62
Eggs—					
On hand, Jan. 1 doz.	2,875,825	5,097,164	3,359,197[4]	4,749,444	4,742,248
Production—Farm “	223,272,000	223,540,000	219,494,000	219,443,000	213,399,000
Other “	20,500,000	20,500,000	20,500,000	20,500,000	20,500,000
Imports “	1.153,715	364,570	869,593	593,558	504,698
“	247,801,540	249,501,734	244,222,790	245,286,002	239,145,946
Exports “	2,001,024	1,300,744	1,203,814	1,602,011	1,842,538
“	245,800,516	248,200,990	243,018,976	243,683,991	237,303,408
On hand, Dec. 31 “	5,097,164	3,315,007	4,749,444	4,742,248[5]	3,831,862
Totals, consumption “	240,703,352	244,885,983	238,269,532	238,941,743[5]	233,471,546
Consumption per capita “	22·24	22·39	21·61	21·49	20·83
Poultry—[6]					
On farms No.	59,798,700	56,768,800	59,339,400	57,510,100	57,237,000
Elsewhere “	5,675,000	5,675,000	5,675,000	5,675,000	5,675,000
Totals “	65,473,700	62,443,800	65,014,400	63,185,100	62,912,000
Marketings “	33,863,555	38,125,350	39,641,625	38,537,805	38,358,900
Estimated dressed weight lb.	186,141,585	205,628,940	212,824,200	207,132.960	206,170,320
On hand, Jan. 1 “	10,729,147	11,228,878	11,435,954	16,194.650	10,406,810
“	196,870,732	216,857,818	224,260,154	223,327,610	216,577,130
Estimated exports “	2,585,606	2,991,356	4,919,317	11,104,366	3,512,765
“	194,285,126	213,866,462	219,340,837	212,223,244	213,064,365
On hand, Dec. 31 “	11,228,878	11,435,954	16,194.650	10,406,810[5]	12,225,159
Totals, consumption “	183,056,248	202,430,508	203,146,187	201,816,434[5]	200,839,206
Consumption per capita “	16·91	18·51	18·43	18·14[5]	17·91

---

[1] For estimates of population upon which per capita figures are calculated, see p. 113. [2] Subject to revision. [3] The basis of compilation for 1938 has been changed and statistics are not comparable with preceding years. The figures will be revised back on the new basis in the 1940 Year Book. [4] Includes carloads in transit. [5] Revised since the publication of the 1938 Year Book. [6] Fowl, turkeys, ducks, and geese.

Export and Import Trade in Live Stock and Live-Stock Products.—The exports of live stock and live-stock products from the Dominion to the United Kingdom, the United States, and all countries, are shown for the four fiscal years ended Mar. 31, 1935-38, in Table **12** of the chapter on External Trade, at pp. 514-516, and imports in Table **13** at pp. 528-530. Exports and imports by calendar years 1932-37, may be found at pp. 71, 73, and 74 of the report on "Live Stock and Animal Products Statistics, 1937". At pp. 57-83 of the report on "Trade of Canada (Imports for Consumption and Exports), Calendar Year 1938" figures are given of exports of animals and animal products for 1937 and 1938 and imports of this class for the same calendar years will be found at pp. 224-248 of the same report.

Section 4.—Cold Storage.

Cold Storage Warehouses.—Under the Cold Storage Act, 1907 (6-7 Edw. VII, c. 6), now consolidated as c. 25, R.S.C., 1927, subsidies have been granted by the Dominion Government to the construction and equipment of cold storage warehouses open to the public, the Act and regulations made thereunder being administered by the Department of Agriculture. Table **18** shows for 1938 the number of cold storage warehouses in Canada, with the refrigerated space. Creameries with mechanical refrigeration are not included in the figures.

18.—Cold Storage Warehouses in Canada, by Provinces, 1938.

Note.—The figures in this table were supplied by J. F. Singleton, Associate Director of Marketing Services, Dairy Products and Cold Storage, Dominion Department of Agriculture.

Province.	Subsidized Public Warehouses.				All Warehouses.	
	Number.	Refrigerated Space.	Cost.	Total Subsidy.	Number.	Refrigerated Space.
		cu. ft.	$	$		cu. ft.
Prince Edward Island	5	261,246	130,674	38,746	9	321,342
Nova Scotia	12	2,424,740	2,803,995	831,918	21	3,113,383
New Brunswick	3	894,177	288,419	86,526	23	1,152,083
Quebec	8	367,474	333,787	100,136	64	11,366,060
Ontario	31	4,125,687	2,053,444	610,009	126	16,860,588
Manitoba	1	27,500	32,000	9,600	36	5,386,703
Saskatchewan	4	441,868	268,707	80,612	21	1,883,563
Alberta	2	367,090	301,512	90,454	16	4,180,325
British Columbia	27	6,311,235	2,607,718	782,315	82	11,497,118
Yukon	Nil	-	-	-	1	44,900
Totals	**93**	**15,221,017**	**8,820,256**	**2,630,316**	**399**	**55,806,065**

Cold Storage Stocks.—Statistics of the stocks of food in the cold storage warehouses of Canada are collected and published monthly by the Agricultural Branch of the Dominion Bureau of Statistics. A summary of cold storage reports is published annually as a separate statement and the same data are included in the report on "Live Stock and Animal Products Statistics", published annually. In Table **19** are included statistics, by months for 1937 and 1938, of the stocks of food in cold storage and in process of cure for various important commodities.

19.—Stocks of Food Commodities on Hand in Cold Storages and Dairy Factories, by Months, 1937 and 1938.

NOTE.—Figures in this table are of stocks on hand at the first of each month as published by the Agricultural Branch, Dominion Bureau of Statistics.

Year and Month.	Eggs.	Butter.	Factory Cheese.	Beef.		
				Fresh, Not Frozen.	Fresh, Frozen.	Cured or in Cure.
	doz.	lb.	lb.	lb.	lb.	lb.
1937.						
January	4,705,254	35,999,543	24,025,899	4,784,458	18,608,326	554,608
February	4,598,418	29,112,998	21,866,628	6,102,067	13,872,673	552,571
March	3,749,647	18,940,512	20,112,309	4.825,504	12,431,621	686,713
April	3,257,157	9,250,690	18,008,959	5,769,785	9,236,342	687,404
May	6,967,345	5,860,895	15,985,455	5,989,584	7,440,367	476,829
June	12,660,324	9,270,550	19,908,736	5,455,536	5,558,451	344,867
July	16,264,639	26,828,920	30,571,172	5,533,237	3,994,224	370,798
August	16,304,980	41,026,247	35,508,497	4,649,544	4,435,946	436,974
September	16,010,116	49,505,246	42,190,862	6,017,035	5,447,974	529,801
October	14,266,584	54,551,566	43,246,764	8,119,511	8,958,668	690,469
November	10,130,137	48,122,269	36,562,193	8,514,250	16,892,754	640,320
December	6,805,055	38,230,729	27,643,125	7,858,576	20,380,674	425,562
1938.						
January	5,804,300	27,907,201	28,559,446	5,503,213	19,356,702	442,379
February	4,725,040	18,480,778	26,550,622	7,823,373	16,520,847	515,310
March	3,690,742	10,263,853	24,178,278	6,154,445	12,963,863	434,905
April	3,786,380	4,478,527	21,403,767	6,197,411	10,648,826	492,728
May	7,753,060	4,552,839	17,786,833	6,032,228	8,814,730	535,689
June	11,744,810	13,069,972	22,857,047	6,649,753	6,037,162	409,312
July	14,123,432	33,010,575	32,568,207	6,032,370	5,313,175	356,191
August	15,106,257	50,567,492	38,978,061	6,132,075	5,110,791	306,885
September	15,234,537	61,543,457	43,639,257	6,121,638	4,407,521	332,862
October	13,566,262	65,090,895	47,227,752	6,990,412	5,458,814	312,154
November	10,064,050	62,969,192	44,266,662	8,760,842	8,364,394	236,937
December	6,897,989	53,523,718	32,294,350	8,509,149	12,327,295	273,731

Month.	Veal.	Pork.			Lard.	Mutton and Lamb.	Poultry.
		Fresh, Not Frozen.	Fresh, Frozen.	Cured or in Cure.			
	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1937.							
January	4,505,211	3,734,090	26,744,239	19,125,988	2,332,425	7,196,840	16,829,115
February	3,321,600	4,251,036	27,166,953	20,359,618	2,206,140	6,168,908	15,761,082
March	2,361,458	4,345,048	29,110,785	21,712,355	2,420,634	5,510,653	13,939,429
April	2,082,829	4,186,886	30,512,801	20,263,511	2,340,209	4,516,891	10,787,878
May	2,105,446	4,733,554	32,492,523	20,719,674	2,954,256	3,252,156	8,145,899
June	2,651,753	3,767,005	27,970,449	19,581,186	2,622,756	1,898,925	6,890,061
July	2,862,992	3,913,491	22,095,125	19,187,419	2,782,583	958,808	5,939,415
August	3,090,403	2,702,456	13,830,259	18,618,887	2,579,023	672,227	5,099,530
September	3,463,481	2,262,187	7,491,472	15,721,388	1,748,681	776,724	3,964,037
October	4,424,131	3,076,467	4,124,684	14,871,203	1,241,203	1,629,814	3,355,145
November	4,369,570	4,266,677	4,996,213	17,127,841	1,207,545	3,421,328	3,788,470
December	4,162,734	5,974,861	9,712,301	16,966,933	1,661,393	5,046,619	6,140,316
1938.							
January	3,206,254	3,588,772	16,358,976	17,312,828	2,301,430	5,276,609	10,740,004
February	2,305,577	4,531,780	18,589,851	17,873,126	2,464,557	4,823,448	9,671,463
March	1,526,507	4,221,581	20,586,120	16,695,188	2,066,935	3,844,075	7,970,919
April	1,231,381	3,605,124	20,912,824	17,410,701	2,903,135	2,781,859	6,275,438
May	2,169,907	4,317,660	23,217,295	16,822,867	3,449,994	1,712,802	4,951,285
June	2,991,667	3,462,828	20,725,668	15,109,444	3,207,483	827,241	3,953,293
July	3,192,705	3,061,855	15,277,247	14,796,734	3,923,728	703,349	3,524,612
August	3,574,389	3,227,909	10,069,005	13,709,746	3,570,581	782,098	3,228,817
September	3,790,712	2,787,686	4,624,156	12,197,449	3,098,296	789,942	2,909,239
October	4,244,268	3,086,075	3,346,977	13,647,443	2,128,051	1,626,311	3,111,513
November	4,876,209	3,675,534	5,361,083	15,432,043	1,807,898	4,566,577	3,432,518
December	5,122,276	4,529,088	6,627,415	13,720,010	1,702,945	5,497,669	6,872,471

Section 5.—Bounties.*

In cases where it is considered advisable for the government to encourage the production of a particular commodity, bounties paid by the government are recognized substitutes for protective duties. In the past they have been made use of by Canada to a considerable degree, but the only bounties which involved payments in the past few years were those on copper bars and rods, hemp, and bituminous coal mined in Canada and used in the manufacture of iron or steel. A statement of the bounties paid under the Copper Bounty Act, which expired on June 30, 1931, and the Hemp Bounty Act, which expired on Dec. 31, 1932, was given on p. 662 of the 1934-35 Year Book. The bounty on bituminous coal was the outcome of a recommendation of the Royal Commission on Maritime Claims relating to the use of Canadian coal in the manufacture of iron and steel and the payments have been as follows:—

Paid in the fiscal year—		
1930–31	273,148 net tons at 49½c.	$ 135,209·23
1931–32	126,356 net tons at 49½c.	62,546·18
1932–33	118,783 net tons at 49½c.	58,797·54
1933–34	213,841 net tons at 49½c.	105,851·25
1934–35	336,849 net tons at 49½c.	166,740·02
1935–36	390,168 net tons at 49½c.	193,133·12
1936–37	564,695 net tons at 49½c.	279,523·96
1937–38	583,817 net tons at 49½c.	288,989·41
1938–39 to Sept. 30th, 1938	180,385 net tons at 49½c.	89,290·56
Totals	2,788,042	$1,380,081·27

Bounties have been paid at various times in the past on iron and steel, on lead, on crude petroleum, on manila fibre, on zinc, and on linen yarns, but the bounties on iron and steel ceased in 1911, on lead in 1918, on zinc in 1921, on linen yarns in 1923, and on crude petroleum in 1927. The total amounts paid in bounties on these commodities between 1896 and the date of expiration were: iron and steel, and manufactures of (1896-1912), $16,785,827; lead (1899-1918), $1,979,216 for 1,187,169,878 lb.; zinc (1919-21), $400,000; linen yarns (1921-23), $17,523; manila fibre (1903-13), $367,962; crude petroleum (1905-27), $3,457,173 on 233,135,217 gallons. (For quantities of crude petroleum and bounties paid in each year, see table on p. 635 of the 1927-28 Year Book.) Total payments for expired bounties between 1896 and 1932, including the $611,763 paid on copper bars and rods and the $26,847 for hemp, aggregated $23,646,311, which, with the $1,122,384 paid for coal, makes a total of $24,768,694 to Oct. 31, 1937. The Year Book of 1915, pp. 459-461, gave a description of the bounties that had been payable since 1883, as well as tables showing, for each commodity, the quantities on which bounties were annually paid and the amounts of such bounties for the years 1896 to 1915, inclusive. For details of the bounties on zinc, see p. 635 of the 1927-28 Year Book.

Section 6.—Patents, Copyrights, and Trade Marks.†

Patents.—Letters patent, which in England have been in the gift of the Crown from the time of the Statute of Monopolies (1624) and earlier, are a statutory grant in Canada and have always been so. The earliest Act was one of Lower Canada, passed in 1824, wherein provision was made for the granting of patent rights to inventors who were British subjects and inhabitants of the province. Upper Canada passed its Act in 1826, and Nova Scotia and New Brunswick passed theirs at later dates. In 1849, after the Union, a consolidating Act was passed applying to both Upper and Lower Canada, and the B.N.A. Act assigned the granting of patents exclusively to the Parliament of Canada. The Dominion Patent Act of 1869 repealed the provincial Acts and has formed the basis of all succeeding legislation.

---

* Revised by L. T. Lett, Department of Trade and Commerce.

† Revised by J. T. Mitchell, Commissioner of Patents, Ottawa.

Letters patent are now issued subject to the provisions of c. 150, R.S.C., 1927 (as amended by c. 4, 1928, c. 34, 1930, c. 21, 1932, and c. 32, 1935), and application for protection relating to patents should be addressed to the Commissioner of Patents, Ottawa, Canada.

The growth of Canadian inventions* is shown by the fact that the number of applications and total fees increased each year without a break from the beginning of the present century until the fiscal year ended Mar. 31, 1913, when 8,681 applications were received and the total fees amounted to $218,125. In the fiscal year ended Mar. 31, 1938, there were 10,950 applications, with fees amounting to $367,127, as shown in Table **21**. Of the patents for 1938, 5,354 or 70 p.c. were issued to United States inventors, 647 to Canadians and 668 to residents of Great Britain and Ireland, while Germany with 432, France with 152, Holland with 121, and Sweden with 62 followed in the number of inventors to whom patents were issued. Applications for patents were distributed over the whole field of invention, but progress was specially noteworthy in the chemical and electrical arts. In the chemical field the development of new artificial resins continued with polyvinyl acetal resins receiving particular attention. The treatment of hydrocarbon oils for the production of motor fuels, aromatics and unsaturated hydrocarbons was very active. The production of artificial hormones as well as improvements in the processes of extracting them from natural substances increased and much attention has been given to the production of concentrates of vitamins and protamine insulin. There were advances in the development of plastic materials and coating compositions from synthetic resins and cellulosic materials.

In the electrical art, television continues to be given the greatest amount of attention. In cathode ray tubes the most noteworthy inventions have been the development of electron multipliers for larger amplification, for greater amounts of power, and for the intensification of optical images.

---

*'Invention' means any new and useful art, process, machine, manufacture, or composition of matter or any new and useful improvement in any art, process, machine, manufacture, or composition of matter.

20.—Numbers of Canadian Patentees, by Province of Residence, fiscal years 1927-38.

Province.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
Prince Edward Island...	5	3	1	3	3	2	Nil	1	2	2	2	2
Nova Scotia............	19	24	16	17	14	18	14	16	9	17	2	7
New Brunswick........	21	12	17	16	18	6	14	8	7	5	12	5
Quebec.................	320	298	293	282	265	272	257	236	227	207	201	176
Ontario.................	499	537	538	500	491	504	462	475	429	365	316	321
Manitoba...............	89	71	61	72	74	47	71	42	34	49	53	39
Saskatchewan..........	68	100	93	81	66	55	37	52	45	30	28	21
Alberta.................	82	88	98	71	76	63	35	48	43	52	32	25
British Columbia.......	129	152	148	126	101	117	113	104	89	65	56	51
Yukon and N.W.T......	Nil	Nil	Nil	1	1	Nil	Nil	Nil	Nil	Nil	1	Nil
Canada............	**1,232**	**1,285**	**1,265**	**1,169**	**1,109**	**1,084**	**1,003**	**982**	**885**	**792**	**703**	**647**

21.—Statistics of Patents Applied for, Granted, etc., fiscal years 1933-38.

Item.		1933.	1934.	1935.	1936.	1937.	1938.
Applications for patents	No.	10,145	9,267	9,404	12,580	10,668	10,950
Patents granted	"	10,241	9,124	8,713	7,791	8,177	7,720
Certificates for renewal fees	"	11	10	12	2	Nil	1
Caveats granted	"	470	466	445	394	423	399
Assignments	"	7,354	6,577	6,840	8,145	7,723	8,249
Fees received, net	$	393,067	362,146	353,460	386,542	377,453	367,127

Copyrights and Trade Marks.—Registration of copyright is governed by c. 32, R.S.C., 1927, and applications for protection relating to copyrights should be addressed to the Commissioner of Patents, Ottawa, Canada.

The Copyright Act of 1921 (amended in 1923 and consolidated in c. 32, R.S.C., 1927) sets out in Sec. 4 the qualifications for a copyright, and in Sec. 5 its duration: "Copyrights shall subsist in Canada . . . in every original literary, dramatic, musical and artistic work, if the author was, at the date of the making of the work, a British subject, a citizen or subject of a foreign country which has adhered to the (Berne) Convention and the additional Protocol . . . or resident within His Majesty's Dominions. The term for which the copyright shall subsist shall, except as otherwise expressly provided by this Act, be the life of the author and a period of fifty years after his death."

Copyright protection is extended to records, perforated rolls, cinematographic films, and other contrivances by means of which a work may be mechanically performed. The intention of the Act is to enable Canadian authors to obtain full copyright protection throughout all parts of His Majesty's Dominions, foreign countries of the Copyright Union, and the United States of America, as well as in Canada.

The Trade Mark and Design Act (c. 201, R.S.C., 1927) was amended by c. 10 of the Statutes of 1928 bringing the Act into agreement with the terms of the Convention for the Protection of Industrial Property, as amended at The Hague in 1925 with regard to refusal to register certain trade marks. The renewal of expired trademark registration was also provided for, and it was enacted that in certain cases interested parties might apply to the Exchequer Court of Canada for the cancellation of a trade mark at any time within three years from its registration. The Unfair Competition Act, 1932 (22-23 Geo. V, c. 38), repealed all parts of the above Act relating to trade marks and all trade marks are now registered under and protected by the new Act.

22.—Statistics of Copyrights, Trade Marks, etc., fiscal years 1933-38.

Item.		1933.	1934.	1935.	1936.	1937.	1938.
Copyrights registered	No.	2,684	2,537	3,060	3,403	3,249	3,241
Trade marks registered	"	2,950	2,066	1,686	1,574	2,068	2,169
Industrial designs registered	"	409	331	430	363	336	544
Timber marks registered	"	4	6	4	3	10	7
Assignments registered	"	1,416	1,143	1,090	1,394	2,093	1,688
Fees received, net	$	146,274	67,196	72,217	68,220	86,396	85,023

Financial Statistics.—The following table gives the receipts, expenditures, and surpluses on account of patents, copyrights, and trade marks for the fiscal years 1930-38.

23.—Receipts, Expenditures, and Surpluses on Account of Patents, Copyrights, and Trade Marks, fiscal years 1930-38.

NOTE.—For figures from 1921 to 1929, see the 1933 Year Book, p. 624.

Fiscal Year.	Receipts.	Expenditures.				Surplus.
		Civil Government.	Patent Record.	Contingencies.	Total.	
	$	$	$	$	$	$
1930	574,918	169,339	34,946	31,622	235.907	339,011
1931	559,646	174,458	35,000	32,000	241,458	318.188
1932	525,248	173.270	35,000	37,893	246,263	278,985
1933	539,341	155,465	25,000	24,829	205,293	334,047
1934	429,342	152,624	32,860	22,649	208,133	221,209
1935	425,677	145,859	26,259	23,630	195,748	229,928
1936	454,762	151,629	24,468	50,583	226,680	228,082
1937	463,850	155,607	28,697	45,725	230,029	233,821
1938	452,150	158,666	28,700	46,763	234,129	218,022

Section 7.—Weights and Measures.*

The object of weights and measures administration is to maintain uniformity and accuracy in the use of the legal standards of the country in industry and commerce.

Prior to Confederation, the administration of weights and measures was in the hands of each Provincial Government but passed to the Dominion Government in 1867, under Sec. 91 of the British North America Act. Steps were then taken to simplify the standards in use and to establish uniformity throughout the Dominion.

What might be termed the principal Weights and Measures Act of Canada was passed in the session of 1872-73; its provisions closely followed English weights and measures law, but the system of weights and measures was greatly simplified. This Act established as the primary legal standards for Canada the imperial pound, gallon, and yard, but in place of the system of stones, quarters, hundredweights (112 lb.), and the long ton (2,240 lb.) it provided a decimal series of weights, 1, 2, 3, 5, 10, 20, 30, 50, 100 lb., and the short ton of 2,000 lb. The only exception to this was the continued use of the old French land measure, the arpent, in Quebec. The troy ounce of 480 grains and its decimal sub-multiples are the legal weights for the weighing of gold and precious metals. The metric system is legal for all transactions.

Many changes, deletions, and additions have been made to the Act of 1873 by later legislation, but its principles remain unchanged. The latest legislation is the Weights and Measures Act (c. 212, R.S.C., 1927), as amended by c. 48, 1935.

The Weights and Measures Service was first administered by the Department of Inland Revenue, and offices were opened in all the principal centres of Canada and equipped with standards and inspection equipment. In 1918 the Service was transferred to the Department of Trade and Commerce. For purposes of administration, the Dominion is divided into 19 districts, each in charge of a district inspector. The chief rules of administration are as follows:—

(*a*) Every new type of weighing and measuring device must be submitted to the Department at Ottawa for approval before being placed on the market.

(*b*) Every new machine must be inspected and stamped by an inspector before being sold or taken into use.

(*c*) Imported machines are held by the customs until release is approved by the nearest inspector.

(*d*) All inspections take place on the traders' premises, except where devices are brought to the inspection offices.

---

* Revised by E. O. Way, Director of Weights and Measures, Department of Trade and Commerce.

The following table, giving a summary of the articles and machines inspected in the fiscal years ended Mar. 31, 1937 and 1938, shows an increase of 53,448 articles and devices inspected over 1936-37, including an increase of 12,384 in weighing machines. The total revenues collected by the Service in the fiscal years ended 1937 and 1938 amounted to $399,626 and $395,465, respectively, while the expenses, including salaries, totalled $345,199 and $385,207, respectively.

24.—Inspections by the Weights and Measures Service, fiscal years 1937 and 1938.

Article.	1937.				1938.			
	Submitted.	Verified.	Rejected.	Per Cent Rejected.	Submitted.	Verified.	Rejected.	Per Cent Rejected.
	No.	No.	No.	p.c.	No.	No.	No.	p.c.
Weights (Dominion)	102,756	98,898	3,858	3·75	123,720	112,516	11,204	9·05
Weights (metric)	1,202	1,169	33	2·75	1,033	997	36	3·50
Measures of capacity	54,046	53,655	391	0·72	58,248	57,758	490	0·84
Measures of length	7,676	7,658	18	0·23	9,038	9,014	24	0·27
Milk-cans	70,757	70,577	180	0·25	81,475	81,229	246	0·30
Ice-cream containers	47,594	47,594	Nil	-	47,017	47,017	Nil	-
Measuring devices (gas pumps)	49,339	41,629	7,710	15·61	54,785	45,212	9,573	17·47
Tank wagons	669	656	13	1·94	738	712	26	3·52
Babcock glassware	40,732	40,568	164	0·40	40,021	39,925	96	0·24
Weighing machines	183,439	158,866	24,573	13·40	195,823	167,575	28,248	14·43
Weighing machines (metric)	773	748	25	3·23	722	696	26	3·60
Domestic scales	14,811	14,615	196	1·32	14,870	14,582	288	1·94
Miscellaneous	12,140	12,105	35	0·29	11,892	11,843	49	0·41
Totals	**585,934**	**548,738**	**37,196**	**6·35**	**639,382**	**589,076**	**50,306**	**7·87**

Section 8.—Electricity and Gas Inspection.*

The Electricity and Gas Inspection Branch of the Department of Trade and Commerce administers three Acts: the Electricity Inspection Act (c. 22, 1928), the Gas Inspection Act (c. 82, R.S.C., 1927), and the Electricity and Fluid Exportation Act (c. 54, R.S.C., 1927).

The latest report of the Branch shows 518,385 electricity and gas meters tested in the fiscal year ended Mar. 31, 1938, as compared with 518,415 in the preceding year. The total revenue derived from electricity and gas inspection was $348,461 as compared with an expenditure of $235,754. The Branch also collected $431,419 as export duty and licence fees under the provisions of the Electricity and Fluid Exportation Act; the cost of collecting this revenue was only $376.

Other related statistics collected in the administration of the last-named Act will be found on p. 366, in the Water Power chapter of the Year Book. Here, however, are given statistics, also collected by the Branch in the process of administration, showing a phenomenal increase in the number of consumers of electricity in the past 24 years from 505,597 to 1,905,692 (Table **25**); a lesser increase in the gas meters in use from 267,454 in 1916 to 685,888 in 1938 (Table **26**); and the number of cubic feet of gas sold in Canada from 1920 to 1938 classified as carburetted water gas, coal gas, coke oven gas, natural gas, acetylene gas, and butane (Table **27**).

---

* Revised by J. L. Stiver, Director, Electricity and Gas Inspection Service, Department of Trade and Commerce.

25.—Numbers of Electricity Meters in Use, fiscal years 1915-38.

Fiscal Year.	Number.	Fiscal Year.	Number.	Fiscal Year.	Number.
1915	505,597	1923	1,046,831	1931	1,653,922
1916	517,629	1924	1,094,639	1932	1,704,197
1917	594,737	1925	1,165,664	1933	1,722,697
1918	661,403	1926	1,240,752	1934	1,720,997
1919	717,776	1927	1,314,428	1935	1,760,262
1920	743,468	1928	1,412,521	1936	1,788,522
1921	860,379	1929	1,499,872	1937	1,839,420
1922	945,599	1930	1,582,505	1938	1,905,692

26.—Numbers of Gas Meters in Use, by Kinds of Gas Consumed, fiscal years 1916-38.

Fiscal Year.	Manufactured Gas.	Natural Gas.	Acetylene Gas.	Butane.	Total.	Fiscal Year.	Manufactured Gas.	Natural Gas.	Acetylene Gas.	Butane.	Total.
1916	199,514	67,940	-	-	267,454	1928	482,076	98,915	357	-	581,348
1917	314,915	55,697	-	-	370,612	1929	504,500	107,504	116	-	612,120
1918	325,244	88,795	-	-	414,039	1930	520,788	118,390	117	-	639,295
1919	336,388	91,056	-	-	427,444	1931	530,909	125,550	67	205[1]	656,731
1920	350,777	85,004	513[1]	-	436,294	1932	540,277	128,194	66	230	668,767
1921	361,479	98,494	577	-	460,550	1933	532,139	128,282	80	285	660,786
1922	366,840	101,785	430	-	469,055	1934	522,484	134,710	49	369	657,612
1923	379,459	102,007	438	-	481,904	1935	517,948	139,763	14	638	658,363
1924	390,548	105,804	425	-	496,777	1936	505,946	158,827	14	1,108	665,895
1925	405,471	106,861	404	-	512,736	1937	506,075	169,132	3	1,035	676,245
1926	443,067	85,752	425	-	529,244	1938	510,261	174,356	3	1,268	685,888
1927	462,496	90,302	358	-	553,156						

[1] First year reported.

27.—Quantity of Each Kind of Gas Sold in Canada, fiscal years 1920-38.

Fiscal Year.	Carburetted Water Gas.	Coal Gas.	Coke Oven Gas.	Natural Gas.	Acetylene Gas.	Butane.	Total.
	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.	M cu. ft.
1920	4,487,512	6,787,370	-	17,117,100	1,670	-	28,393,652
1921	5,331,442	7,096,222	-	[1]	[1]	-	12,427,664[3]
1922	4,668,392	8,433,861	-	11,289,592	1,005	-	24,392,850
1923	6,632,962	7,637,114	132[2]	12,238,837	1,165	-	26,510,210
1924	5,214,843	8,042,882	3,189	14,866,619	1,194	-	28,128,727
1925	5,254,803	7,824,193	91,628	10,525,604	1,266	-	23,697,494
1926	4,835,613	8,149,894	1,449,795	13,004,470	1,211	-	27,440,983
1927	5,804,504	8,405,556	1,049,978	17,863,366	1,247	-	33,124,651
1928	6,883,635	7,488,965	1,680,237	20,365,049	1,325	-	36,419,211
1929	4,550,829	6,273,275	6,097,920	25,491,446	647	-	42,414,117
1930	4,456,997	5,802,653	8,153,473	31,880,845	847	-	50,294,815
1931	4,214,554	6,249,190	7,792,047	28,534,604	875	9,137[2]	46,800,407
1932	4,267,074	6,385,622	7,235,463	27,244,803	790	6,600	45,140,352
1933	3,821,680	7,491,005	5,908,231	27,342,696	4,982	11,930	44,580,524
1934	3,349,893	7,652,344	5,331,047	26,423,633	4,737	13,268	42,774,922
1935	2,256,568	8,378,714	6,267,577	25,051,664	5,729	12,576	41,972,828
1936	1,972,511	7,876,353	6,637,103	29,334,639	6,774	16,976	45,844,356
1937	1,969,493	6,894,858	7,685,207	30,291,438	8,066	19,781	46,868,843
1938	2,301,030	6,945,789	7,229,881	31,370,930	9,889	21,301	47,878,820

[1] Not reported. [2] First year reported. [3] Not including natural gas and acetylene gas which were not reported for this year.

Section 9.—Merchandising and Service Establishments.*

A comprehensive census of business carried on by trading and service establishments was undertaken for the first time in 1931 in connection with the Seventh Decennial Census. A partial survey of trading establishments had been made in 1924, but the results of this initial survey, while indicative of the extent of domestic trade, suffered from the incompleteness of the canvass made. The Census of Merchandising and Service Establishments, 1931, covered not only the operations of retail and wholesale merchandising establishments in 1930 but also those of service establishments, including hotels. In addition, information was collected to show the initial channels (manufacturers' wholesale branches, other wholesalers, retailers, industrial consumers, export sales, etc.) through which goods manufactured in Canada are distributed and the proportion of the total value of production sold through each channel. The results of the census have been published in several series of reports and in Volumes X and XI of the Census of 1931.

Annual Statistics.—An outgrowth of the Census of Merchandising and Service Establishments, 1931, has been an annual survey of wholesale and retail trade based on reports from larger concerns in the respective fields. In the case of wholesale trade, the annual survey is confined to wholesalers proper and reports are secured from firms which had a volume of sales of $100,000 or more in 1930 together with firms of a similar size which have commenced business since 1930. The survey of retail trade is based on the reports of all chain stores and of independent stores with a turnover of $20,000 or more in 1930. Reports are also secured from newly-established independent stores. While the annual figures for merchandising are not based on such a comprehensive survey as that made in connection with the decennial census, they provide the most reliable indicators available of recent trends in merchandise trade as they cover more than two-thirds of the dollar volume of business.

Monthly Statistics.—Monthly indexes of retail sales, based on returns from department stores, chain stores, and a representative sample of independent firms, are now available for the period commencing January, 1929. A description of these indexes appears in Subsection 2 of this chapter. Monthly indexes of wholesale trade are also available, although for the shorter period beginning January, 1936. This series is shown in Table 30.

Subsection 1.—Wholesale and Other Bulk or Non-Retail Merchandising.

Under this heading there appeared at pp. 670-672 of the 1934-35 Year Book a summary of trade in the wholesale field, as derived from the Census of Merchandising and Service Establishments, and tables showing, for 1930, bulk merchandising statistics (1) by provinces, and (2) by type of distributor. The interested reader is referred to that material, which is the latest available on that basis.

Wholesale Trade in Canadian Cities, 1930.—Figures for all wholesale establishments and for wholesalers proper in cities of over 20,000 population are shown for 1930 in Table 28. Included in the figures for all wholesale establishments are data for agents, brokers, manufacturers' sales branches, and other specialized wholesale agencies. Wholesalers proper embrace only regular wholesale houses, such as wholesale merchants, importers, and exporters. The importance of such cities as Montreal, Toronto, Winnipeg, and Vancouver as wholesale centres is clearly shown by the figures.

---

* Prepared by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. For a list of publications of this Branch, see Chapter XXIX, Section 1, under "Internal Trade".

28.—Bulk Merchandising (Wholesale and Other Non-Retail) in Cities of 20,000 Population or Over, 1930.

City and Province.	Population, 1931.	All Wholesale Establishments.					Wholesalers Proper.	
		Establishments.	Employees.	Salaries and Wages.	Net Sales (1930).	Stocks on Hand, End of Year (at Cost).	Establishments.	Net Sales (1930).
	No.	No.	No.	$	$	$	No.	$
Montreal, Que.....	818,577	1,838	21,400	35,649,800	766,332,800	68,043,000	1,035	287,176,800
Toronto, Ont......	631,207	1,835	19,891	33,743,000	691,738,400	60,106,000	971	227,375,400
Vancouver, B.C...	246,593	761	5,712	9,757,200	211,111,800	23,059,900	341	78,382,100
Winnipeg, Man.....	218,785	768	8,379	14,215,600	635,722,200	25,522,100	314	72,862,800
Hamilton, Ont....	155,547	191	1,778	2,904,800	47,755,800	5,578,800	119	21,314,200
Quebec, Que.......	130,594	249	2,416	3,167,800	75,180,800	6,981,000	144	33,497,800
Ottawa, Ont......	126,872	199	1,660	2,447,600	41,592,300	5,587,600	114	26,254,000
Calgary, Alta.....	83,761	261	2,818	4,916,100	92,127,900	11,715,600	114	30,499,000
Edmonton, Alta...	79,197	200	1,832	3,115,700	63,940,100	8,193,500	82	24,701,200
London, Ont......	71,148	147	1,269	2,145,000	32,059,000	3,565,000	83	15,503,400
Windsor, Ont......	63,108	92	725	1,155,400	19,141,800	1,818,700	56	9,819,700
Verdun, Que.......	60,745	6	15	22,400	592,700	28,900	6	592,700
Halifax, N.S......	59,275	163	1,462	2,181,600	42,676,900	3,998,200	84	20,439,600
Regina, Sask......	53,209	148	1,991	3,260,700	46,877,500	9,713,200	60	17,637,300
Saint John, N.B...	47,514	181	1,964	2,889,500	49,538,200	4,974,800	83	17,995,700
Saskatoon, Sask...	43,291	115	1,426	2,283,500	39,312,400	6,323,200	51	17,316,000
Victoria, B.C......	39,082	65	487	725,700	13,704,000	1,839,400	36	8,114,300
Three Rivers, Que.	35,450	30	165	215,300	5,083,500	866,700	16	2,700,700
Kitchener, Ont....	30,793	51	245	395,500	7,391,400	624,500	32	3,428,400
Brantford, Ont....	30,107	36	300	417,200	7,184,400	879,200	22	3,583,100
Hull, Que.........	29,433	11	53	75,200	1,138,500	86,200	6	310,300
Sherbrooke, Que..	28,933	41	355	540,500	9,452,200	1,145,100	20	7,146,600
Outremont, Que...	28,641	9	167	292,000	4,572,300	814,700	5	1,127,500
Fort William, Ont.	26,277	41	433	650,400	15,627,100	2,760,100	27	7,897,900
St. Catharines, Ont............	24,753	25	110	158,700	2,641,200	237,500	12	1,378,300
Westmount, Que...	24,235	7	173	302,400	2,059,200	426,100	5	1,208,000
Kingston, Ont.....	23,439	39	280	407,400	7,351,100	1,400,700	29	4,582,100
Oshawa, Ont......	23,439	19	286	1,039,500	16,689,600	226,800	8	1,021,800
Sydney, N.S......	23,089	31	165	247,500	6,857,000	600,900	20	5,316,200
Sault Ste. Marie, Ont............	23,082	20	139	195,300	4,997,100	501,600	14	3,433,000
Peterborough, Ont.	22,327	25	136	188,100	3,874,100	291,200	15	2,031,400
Moose Jaw, Sask..	21,299	37	320	497,700	9,980,700	1,048,400	19	5,969,900
Guelph, Ont.......	21,075	21	138	196,300	3,430,600	501,300	16	2,580,800
Glace Bay, N.S...	20,706	6	18	18,000	478,700	73,200	4	386,800
Moncton, N.B.....	20,689	36	287	342,000	6,195,800	911,300	16	3,254,200

Annual Wholesale Statistics.—In constructing an annual index of wholesale sales, the chief objective has been to obtain the most representative measure of wholesale trade and particularly of the pre-retail business. This annual index is confined to wholesalers proper, who are for the most part wholesale merchants, importers, exporters, and supply and machinery distributors. From this group are excluded such distributors as agents and brokers, manufacturers' sales branches and other types of specialized distributors. However, in order to attain the above-mentioned objective of a representative measure of wholesale trade, it was later found to be necessary to make certain alterations in the classifications used in presenting the results of the Census of Merchandising and Service Establishments, 1931. These alterations were referred to at p. 612 of the 1937 Year Book.

Total sales and indexes are shown in Table **29**, by provinces and kinds of business; the 1930 figures are those of the census, while those for the other years are estimates based on the results of fairly extensive annual surveys. Wholesale trade during 1937 totalled $1,352,212,000, up 14·4 p.c. from 1936 and only 1·3 p.c. below the $1,370,066,000 recorded for 1930. Sales in Prince Edward Island and Saskatchewan were practically unchanged in 1937 from the preceding year while all other provinces reported increases ranging from 9·2 p.c. for Alberta to 18·3 p.c. for Quebec. The largest increases in sales in 1937, as in the immediately preceding years, were reported by firms dealing in industrial or building equipment and which had suffered the most severe losses in trade between 1930 and 1933.

29.—Total Sales and Indexes of Sales made by Wholesalers Proper, by Provinces and Kinds of Business, 1930, 1933, 1936, and 1937.

Province or Kind of Business.	Total Net Sales.				Indexes of Sales. (1930=100.)				Per Cent Change in Net Sales, 1936-37.
	1930.	1933.	1936.	1937.	1930.	1933.	1936.	1937.	
	$'000	$'000	$'000	$'000					
Prince Edward Island	7,518	4,662	6,297	6,308	100·0	62·0	83·8	83·9	+ 0·2
Nova Scotia	46,464	32,812	42,385	47,516	100·0	70·6	91·2	102·3	+12·1
New Brunswick	38,320	25,192	32,530	37,805	100·0	65·7	84·9	98·7	+16·2
Quebec	386,229	254,696	327,034	386,953	100·0	65·9	84·7	100·2	+18·3
Ontario	471,618	324,828	431,477	495,682	100·0	68·9	91·5	105·1	+14·9
Manitoba	98,960	64,461	87,473	100,367	100·0	65·1	88·3	101·4	+14·8
Saskatchewan	90,210	48,555	64,025	63,838	100·0	53·8	70·9	70·8	− 0·3
Alberta	99,333	61,872	78,790	86,023	100·0	62·3	79·3	86·6	+ 9·2
British Columbia	131,414	83,418	111,532	127,720	100·0	63·5	84·9	97·2	+14·5
Totals	**1,370,066**	**900,496**	**1,181,543**	**1,352,212**	**100·0**	**65·7**	**86·2**	**98·7**	+14·4
Amusement, photographic and sporting goods	4,278	2,464	3,354	3,865	100·0	57·6	78·4	90·3	+15·2
Automotive	20,990	13,473	18,875	21,256	100·0	64·2	89·9	101·3	+12·6
Chemicals and paints	8,387	7,743	10,702	11.695	100·0	92·3	127·6	139·4	+ 9·3
Drugs and drug sundries	27,973	22,139	26,644	29,554	100·0	79·1	95·2	105·7	+10·9
Coal and coke	50,252	42,881	55,748	59,836	100·0	85·3	110·9	119·1	+ 7·3
Dry goods and apparel	102,358	64,396	79,122	86,822	100·0	62·9	77·3	84·8	+ 9·7
Electrical	22,982	9,973	19,170	25,775	100·0	43·4	83·4	112·2	+34·5
Farm supplies	16,037	8,719	10,483	14,955	100·0	54·4	65·4	93·3	+42·7
Foods	540,820	377,670	482,819	533,948	100·0	69·8	89·3	98·7	+10·6
Groceries	*223,838*	*184,436*	*217,713*	*235,515*	*100·0*	*82·4*	*97·3*	*105·2*	*+ 8·2*
Dairy and poultry products	*48,771*	*32,185*	*40,860*	*48,658*	*100·0*	*66·0*	*83·8*	*99·8*	*+19·1*
Fruits and vegetables	*99,102*	*63,176*	*83,236*	*91,916*	*100·0*	*63·7*	*84·0*	*92·7*	*+10·4*
Meats and fish	*169,109*	*97,873*	*141,010*	*157,859*	*100·0*	*57·9*	*83·4*	*93·3*	*+11·9*
Furniture and house furnishings	13.632	7,293	10,163	12,255	100·0	53·5	74·6	89·9	+20·6
General merchandise	13,478	8,668	12,886	15,023	100·0	64·3	95·6	111·5	+16·6
Hardware	65,943	38,025	56,075	66,118	100·0	57·7	85·0	100·3	+17·9
Jewellery and optical goods	10,858	6,935	11,374	13,561	100·0	63·9	104·8	124·9	+19·2
Leather and leather goods	7,377	5,325	6,854	7,956	100·0	72·2	92·9	107·8	+16·1
Lumber and building materials	51,872	18,912	34,234	41,982	100·0	36·5	66·0	80·9	+22·6
Machinery, equipment and supplies	59,321	21,789	39,696	54,101	100·0	36·7	66·9	91·2	+36·3
Metals and metal work	14,059	6,817	12,821	17,861	100·0	48·5	91·2	127·0	+39·3
Paper and paper products	22,462	17,263	21,287	24,103	100·0	76·9	94·8	107·3	+13·2
Petroleum products	230,169	163,315	189,272	218,419	100·0	71·0	82·2	94·9	+15·4
Plumbing and heating equipment and supplies	14,512	5,508	9,078	11,704	100·0	38·0	62·6	80·7	+28·9
Tobacco and confectionery	45,870	32,165	41,403	47,167	100·0	70·1	90·3	102·8	+13·9
Waste materials	10,118	6,335	12,824	14,936	100·0	62·6	126·7	147·6	+16·5
All other	16,318	12,688	16,659	19,320	100·0	77·8	102·1	118·4	+16·0

Monthly Indexes of Wholesale Sales.—Commencing with January, 1935, the Dominion Bureau of Statistics has published monthly indexes of wholesale sales based on returns submitted by approximately 200 wholesale firms comprising a representative sample of nine different lines of business. The base on which these indexes were first computed was that of average monthly sales in 1935 equalling 100; the results of the annual surveys of wholesale trade were then utilized in reducing the monthly indexes to the 1930 base in order that they should conform with other series. Since the monthly indexes are based upon a smaller coverage of sales than that secured for the annual census, these results cannot be expected to have the accuracy of the more exhaustive survey. The monthly indexes do, however, give a fair indication of current trends in wholesale trade.

Dollar volume of wholesale sales averaged 3·5 p.c. lower in 1938 than in 1937 for the nine lines of business included in the monthly indexes. Wholesalers in the dry goods, clothing, and footwear trades suffered the greatest losses, sales for these groups ranging from 10 to 13 p.c. lower in 1938 than in the preceding year. Wholesale grocery sales were off by 2·9 p.c. and hardware was down by 5·6 p.c. Dealers in automotive equipment and tobacco and confectionery reported increases over 1937 while other groups showed but minor changes.

Figures on a regional basis show that the Prairie Provinces made the best showing relative to 1937 with a decline of only 1·2 p.c. The decrease for Quebec province was greatest at 6·3 p.c.

30.—Unadjusted Index Numbers of Wholesale Sales, by Economic Divisions and by Kinds of Business, January, 1936, to December, 1938.

(Average for 1930=100.)

Year and Month.	Wholesale Trade. (Composites of nine lines of business.)						Selected Kinds of Business.						
	Canada.	Maritime Provinces.	Que.	Ont.	Prairie Provinces.	B.C.	Automotive Supplies.	Drugs.	Footwear.	Dry Goods.	Groceries.	Fruits and Vegetables.	Hardware.
1936.													
January	61·6	59·6	54·1	68·3	56·8	67·6	56·3	86·7	36·8	48·2	77·8	54·8	48·8
February	65·5	62·0	62·7	70·4	58·1	74·4	50·0	88·7	55·4	59·4	79·8	58·0	53·8
March	76·2	74·5	77·0	80·0	68·6	79·7	65·6	94·7	103·6	77·9	83·7	73·6	74·1
April	81·8	87·7	81·8	85·4	73·1	85·8	84·7	93·1	88·6	76·6	89·2	84·1	85·7
May	86·9	89·6	86·9	93·2	76·7	89·6	92·0	90·6	100·0	75·1	93·1	97·7	95·3
June	89·1	93·5	90·3	94·3	79·5	89·7	87·1	91·6	92·2	69·3	97·6	108·8	94·5
July	90·3	95·6	79·2	95·5	87·1	98·4	83·8	92·4	67·2	51·9	112·1	103·2	86·3
August	90·1	87·8	77·9	89·3	96·9	92·6	101·7	88·6	95·1	74·6	106·1	89·0	88·2
September	101·2	105·9	101·2	97·9	102·5	95·9	128·7	103·7	129·0	107·2	110·0	92·3	103·5
October	103·8	107·7	106·3	98·9	104·7	99·2	138·7	109·8	162·9	102·8	115·4	83·0	110·8
November	90·2	98·2	93·5	88·5	82·1	98·2	110·9	104·4	109·9	87·2	102·3	70·2	93·3
December	85·6	92·4	78·3	91·0	78·6	93·4	82·9	96·7	86·4	66·3	99·0	86·6	85·7
Averages, 1936	**85·2**	**87·9**	**82·4**	**87·7**	**80·4**	**88·7**	**90·2**	**95·1**	**93·9**	**74·7**	**97·2**	**83·4**	**85·0**
1937.													
January	70·0	72·5	62·5	76·5	62·1	81·7	62·5	96·2	51·4	51·4	86·5	65·0	61·7
February	73·8	72·7	71·5	78·4	65·9	81·8	61·1	103·2	76·6	70·7	83·9	68·6	68·8
March	91·4	93·0	89·7	91·5	84·3	104·8	76·1	104·8	103·8	85·1	99·8	89·7	103·5
April	94·4	102·5	96·3	93·9	84·6	105·5	98·8	104·5	117·2	84·4	96·7	98·0	118·5
May	96·5	103·0	100·3	99·3	82·3	108·9	105·1	98·3	111·8	84·0	100·8	108·7	113·0
June	100·4	107·6	103·0	105·5	85·1	111·5	96·4	102·6	98·7	79·3	109·6	116·3	113·6
July	97·4	107·3	87·5	99·5	91·0	116·8	89·9	101·8	61·1	59·6	119·1	102·0	102·3
August	98·2	100·8	92·3	96·8	95·9	110·6	107·0	104·8	117·2	88·2	111·4	90·2	102·0
September	113·3	123·6	118·9	109·2	108·5	112·4	143·1	122·2	160·2	118·8	123·3	102·3	116·2
October	107·4	116·7	116·4	105·6	97·5	108·5	134·4	116·9	159·5	112·5	117·5	88·9	111·4
November	96·6	108·0	98·9	94·9	88·6	104·2	104·9	111·4	93·7	92·6	111·8[1]	79·9	96·8
December	86·9[1]	97·3[1]	85·7[1]	92·3[1]	74·2[1]	96·2	85·2[1]	104·4	96·8	66·8	99·7[1]	87·1[1]	83·1[1]
Averages, 1937	**93·9**[1]	**100·4**	**93·6**	**95·3**[1]	**85·0**[1]	**103·6**	**97·0**[1]	**105·9**	**104·0**	82·8	**105·0**[1]	**91·4**[1]	**99·2**

---

[1] Revised since the publication of the 1938 Year Book.

30.—Unadjusted Index Numbers of Wholesale Sales, by Economic Divisions and by Kinds of Business, January, 1936, to December, 1938—concluded.

Year and Month.	Wholesale Trade. (Composites of nine lines of business.)						Selected Kinds of Business.						
	Canada.	Maritime Provinces.	Que.	Ont.	Prairie Provinces.	B.C.	Automotive Supplies.	Drugs.	Footwear.	Dry Goods.	Groceries.	Fruits and Vegetables.	Hardware.
1938.													
January	68·3	74·6	60·9	74·9	60·1	78·3	64·4	99·0	38·3	49·2	82·1	66·3	61·3
February	71·7	73·6	70·6	76·6	61·8	80·6	60·6	94·6	61·4	62·6	83·3	70·1	64·5
March	87·8	93·1	88·4	90·2	77·9	98·1	78·5	104·8	99·6	80·9	97·4	85·7	90·8
April	89·4	94·6	90·6	93·7	78·4	95·9	99·5	104·2	104·0	78·2	93·5	96·3	100·0
May	95·5	103·9	97·1	99·8	81·5	107·9	103·6	102·3	101·8	77·0	102·3	109·1	106·3
June	100·1	104·5	97·7	104·7	89·3	111·6	100·2	102·5	93·2	68·7	112·9	117·2	108·1
July	90·1	98·9	76·3	91·5	89·8	103·4	102·3	99·9	53·6	47·3	110·3	95·7	93·0
August	98·2	98·2	84·7	95·1	102·9	111·9	124·0	109·2	104·8	76·6	114·1	88·4	102·4
September	106·7	109·1	106·3	104·6	106·3	104·4	151·4	120·6	141·0	101·8	115·7	97·0	110·7
October	97·8	105·1	100·8	93·7	95·1	99·0	140·7	114·8	102·4	90·8	107·3	81·5	104·8
November	94·7	101·5	96·8	94·8	88·2	96·4	112·5	111·6	108·7	87·1	106·2	78·0	99·5
December	87·0	95·9	82·2	91·7	76·4	99·5	81·3	106·9	80·4	65·2	99·2	93·6	81·4
Averages, 1938	**90·6**	**96·1**	**87·7**	**92·6**	**84·0**	**98·9**	**101·6**	**105·9**	**90·8**	**73·8**	**102·0**	**89·9**	**93·6**

Subsection 2.—Retail Trade and Service Establishments.*

As complete a review of the retail merchandising and service statistics as will appear in the Year Book from the Census of Merchandising and Service Establishments, 1931, was given at pp. 673-690, inclusive, of the 1934-35 Year Book. This review gave detailed analyses of such trade, annual net sales, and employees engaged, by provinces, business groups and kinds of business, and by manner of operation (*i.e.*, independents, two-store multiples, three-store multiples, voluntary and other types of chains, etc.). Since these statistics will stand until the next census is taken, it has been considered unnecessary to reprint them in this edition of the Year Book. In this edition, therefore, the only table reprinted, and this merely in part, is that showing the retail trade in Canadian cities, which appears now as Table **31**. There is, however, additional new matter presented dealing with: (1) total sales and indexes of sales, by provinces and kinds of business, 1930 and 1933-37 (figures for 1930 being from the census and those for other years estimates based upon returns secured from the annual surveys); (2) the growth of the chain store; (3) the monthly index of retail sales and in which corrections have been made to allow for variations in number of business days and for seasonal changes; (4) detailed statistics showing the importance of the motion picture industry; and (5) statistics of sales of new and used motor vehicles.

---

* A review of retail trade for the period 1923-30 was given at pp. 637-639 of the 1936 Year Book. This was summarized from a special study report "A Decade of Retail Trade" published in bulletin form in 1935 by the Internal Trade Branch of the Dominion Bureau of Statistics.

Retail Merchandise Trade in Canadian Cities.—The retail merchandise trade in Canadian cities of over 20,000 population during 1930, according to the Census of 1931, is shown in Table **31.*** The cities are arranged in descending order according to their 1931 census populations. A notable feature of these figures is the wide variation in different cities in the relationship between population and retail sales. In general, per capita sales are high for cities which form distributing centres for large or populous areas, while such sales are lowest in residential or industrial cities adjacent to larger centres, as in the case of Verdun, Outremont, Westmount, and Hull.

---

* A similar table showing retail merchandise trade in cities of over 10,000 population is given at pp. 684-685 of the 1934-35 Year Book.

31.—Retail Merchandise Trade in Cities of 20,000 Population or Over, 1930.

City and Province.	Population, 1931.	Establishments.	Full-Time Employees.			Net Sales.	Stocks on Hand, End of Year (at Cost).
			Male.	Female.	Salaries and Wages.		
	No.	No.	No.	No.	$	$	$
Montreal, Que	818,577	11,959	27,144	12,622	40,171,900	369,471,200	52,939,200
Toronto, Ont	631,207	8,725	23,601	13,473	44,548,300	372,682,900	46,777,000
Vancouver, B.C	246,593	3,845	7,911	4,288	13,516,200	122,830,900	18,660,700
Winnipeg, Man	218,785	2,486	8,164	5,513	15,379,600	131,480,200	15,542,700
Hamilton, Ont	155,547	2,117	3,831	2,082	6,528,500	68,512,800	9,605,200
Quebec, Que	130,594	1,742	3,824	1,437	4,696,900	48,172,200	9,555,600
Ottawa, Ont	126,872	1,525	3,896	1,978	6,205,700	59,702,200	10,449,800
Calgary, Alta	83,761	1,136	2,686	1,262	4,809,600	43,389,800	7,143,100
Edmonton, Alta	79,197	1,054	2,235	1,176	4,011,200	37,555,900	6,202,600
London, Ont	71,148	1,074	2,135	985	3,426,300	35,596,000	4,883,600
Windsor, Ont	63,108	903	1,938	615	3,300,600	30,122,400	4,539,000
Verdun, Que	60,745	588	938	297	1,163,300	12,774,300	1,678,100
Halifax, N.S	59,275	900	1,662	1,125	2,709,300	29,843,200	4,190,300
Regina, Sask	53,209	569	2,016	951	3,407,200	33,105,600	5,555,800
Saint John, N.B	47,514	822	1,465	846	2,160,100	21,435,100	3,233,700
Saskatoon, Sask	43,291	546	1,536	760	2,639,500	25,364,200	4,277,200
Victoria, B.C	39,082	809	1,790	914	2,944,900	27,108,500	4,998,900
Three Rivers, Que	35,450	456	719	312	960,100	10,079,700	1,857,200
Kitchener, Ont	30,793	399	725	343	1,211,300	13,770,500	2,005,700
Brantford, Ont	30,107	451	809	375	1,230,300	13,966,900	1,937,100
Hull, Que	29,433	443	645	133	663,800	7,776,900	1,319,300
Sherbrooke, Que	28,933	428	737	258	977,400	10,959,900	2,050,600
Outremont, Que	28,641	129	365	45	455,100	4,306,700	487,900
Fort William, Ont	26,277	333	544	300	830,300	10,003,300	1,723,000
St. Catharines, Ont	24,753	437	802	383	1,328,500	14,664,800	2,340,200
Westmount, Que	24,235	128	504	116	727,500	6,330,100	600,500
Kingston, Ont	23,439	376	858	328	1,214,500	12,873,200	2,079,000
Oshawa, Ont	23,439	278	584	159	802,900	8,498,500	1,192,900
Sydney, N.S	23,089	340	445	258	637,100	8,136,700	1,483,900
Sault Ste. Marie, Ont	23,082	357	436	231	682,400	9,984,500	1,783,400
Peterborough, Ont	22,327	383	688	317	969,500	11,132,500	1,706,600
Moose Jaw, Sask	21,299	308	611	248	993,100	9,688,400	1,574,600
Guelph, Ont	21,075	309	497	241	792,200	9,194,400	1,388,200
Glace Bay, N.S	20,706	232	200	156	277,300	4,268,100	680,000
Moncton, N.B	20,689	302	920	699	1,621,700	20,751,400	2,290,700

Annual Retail Statistics.—As in the case of wholesale merchandising, annual statistics of retail sales are based on the complete census covering 1930, supplemented by an annual survey of all the more important retail establishments, such establishments having accounted for over two-thirds of the total value of sales in 1930. In Table 32, therefore, the figures for 1930 are the results of the comprehensive census, while the figures for later years are estimates calculated from the annual surveys.

It is impossible to measure accurately the effect of the general decline in prices as a factor in the decrease in the total sales from 1930 to 1933. It probably was the principal factor in the food and apparel groups. On the other hand, the prices of more

32.—Total Sales and Indexes of Sales of Retail Merchandise

No.	Province or Group and Kind of Business.	Total Sales.		
		1930.	1933.	1934.
		$'000	$'000	$'000
1	Prince Edward Island	13.774	8.905	9.684
2	Nova Scotia	99.520	68.839	76.818
3	New Brunswick	84.372	52,375	58.333
4	Quebec	651,138	422.297	449,327
5	Ontario	1.099.990	741,630	824.034
6	Manitoba	189,244	122.045	131.390
7	Saskatchewan	189,181	103.091	112.314
8	Alberta	176,537	109,074	121.839
9	British Columbia	248,598	155.747	172,927
10	Yukon and Northwest Territories	3,216	1,765	2,088
	Canada	**2,755,570**	**1,785,768**	**1,958,754**
	Food Group.			
11	Bakery product stores (manufacturing bakeries not included)	11,028	7,727	8,343
12	Candy and confectionery stores	54,176	33.010	33,880
13	Dairy product dealers (other than manufacturing dairies)	37,174	26,451	28,607
14	Fruit and vegetable stores	16,293	12,394	13,076
15	Grocery and combination stores	405,403	297,307	307,478
16	Meat markets (including sea foods)	83,026	50,090	55,578
17	Other food stores	8,376	5.039	5,233
	Totals, Food Group	**615,476**	**432,018**	**452,195**
18	**Country General Stores**	**228,804**	**151,233**	**167,216**
	General Merchandise Group.			
19	Department stores	355,259	241 850	254.001
20	Dry goods stores	31,706	21,000	23.006
21	General merchandise stores	20,366	13.217	14.729
22	Variety stores	44,212	37,256	40,041
	Totals, General Merchandise Group	**451,543**	**313,323**	**331,777**
	Automotive Group.			
23	Motor vehicle dealers	253,608	129.889	179.139
24	Accessories, tires, and batteries	10,956	7.200	7.068
25	Filling stations	66,449	58,428	65,321
26	Garages	47,560	30.230	31,640
27	Other automotive establishments (including motorcycles, bicycles, and supplies)	3.386	1,899	2,141
	Totals, Automotive Group	**381,959**	**227,646**	**285,309**

---

[1] Revised since the publication of the 1938 Year Book.

durable goods have not declined so much as food prices, so that the greater reduction in sales of groups handling durable goods is, no doubt, due much more to reduced volume.

The improvement in retail trade, evident in Canada since the spring months of 1933, was continued in 1937 when the value of sales was 11·1 p.c. greater than in the preceding year and 37 p.c. greater than in 1933. The index of retail sales for 1937 on the base 1930 equals 100 stands at 89·0. Sales in Saskatchewan were 2·1 p.c. lower in 1937 than in 1936. All other provinces reported increases; these ranged from 3·5 p.c. in Prince Edward Island to 14·5 p.c. in New Brunswick.

Trade, by Provinces and Kinds of Business, 1930, 1933-37.

Total Sales.			Indexes of Retail Sales. (1930=100.)						Per Cent Change, 1936-37.	No.
1935.	1936.	1937.	1930.	1933.	1934.	1935.	1936.	1937.		
$'000	$'000	$'000							p.c.	
9,901	11,351	11,748	100·0	64·7	70·3	71·9	82·4	85·3	+ 3·5	1
81,257	88,249[1]	99,336	100·0	69·2	77·2	81·6	88·7[1]	99·8	+12·6	2
61,681	66,965	76,656	100·0	62·1	69·1	73·1	79·4	90·9	+14·5	3
464,109	498,143	565,921	100·0	64·9	69·0	71·3	76·5	86·9	+13·6	4
858,162	913,223	1,022,068	100·0	67·4	74·9	78·0	83·0	92·9	+11·9	5
138,947	148,541	161,253	100·0	64·5	69·4	73·4	78·5	85·2	+ 8·6	6
119,586	131,935[1]	129,166	100·0	54·5	59·4	63·2	69·7[1]	68·3	− 2·1	7
130,633[1]	138,853[1]	152,408	100·0	61·8	69·0	73·3	78·7[1]	86·3	+ 9·8	8
188,424	208,913[1]	232,740	100·0	62·6	69·6	74·0[1]	84·0[1]	93·6	+11·4	9
2,197	1,969	2,419	100·0	54·9	64·9	68·3	61·2	75·2	+22·9	10
2,054,897[1]	**2,208,142[1]**	**2,453,715**	**100·0**	**64·8**	**71·1**	**74·6[1]**	**80·1[1]**	**89·0**	**+11·1**	
8,883	9,219	9,967	100·0	70·1	75·7	80·6	83·6	90·4	+ 8·1	11
35,202	36,727	39,598	100·0	60·9	62·5	65·0	67·8	73·1	+ 7·8	12
31,027	32,915	35,844	100·0	71·2	77·0	83·5	88·5	96·4	+ 8·9	13
13,360	14,348	14,983	100·0	76·1	80·3	82·0	88·1	92·0	+ 4·4	14
312,197	325,261	347,752	100·0	73·3	75·8	77·0	80·2	85·8	+ 6·9	15
58,712	60,579	64,865	100·0	60·3	66·9	70·7	73·0	78·1	+ 7·1	16
5,580	5,952	6,345	100·0	60·2	62·5	66·6	71·1	75·8	+ 6·6	17
464,961	**485,001**	**519,354**	**100·0**	**70·2**	**73·5**	**75·5**	**78·8**	**84·4**	**+ 7·1**	
172,456	**182,734**	**194,480**	**100·0**	**66·1**	**73·1**	**75·4**	**79·9**	**85·0**	**+ 6·4**	18
258,653	273,358	288,096	100·0	68·1	71·5	72·8	76·9	81·1	+ 5·4	19
23,365	24,624	26,627	100·0	66·2	72·6	73·7	77·7	84·0	+ 8·1	20
15,433	16,566	18,263	100·0	64·9	72·3	75·8	81·3	89·7	+10·2	21
42,409	46,281	51,585	100·0	84·3	90·6	95·9	104·7	116·7	+11·5	22
339,860	**360,829**	**384,571**	**100·0**	**69·4**	**73·5**	**75·3**	**79·9**	**85·2**	**+ 6·6**	
217,507[1]	257,151[1]	332,742	100·0	51·2	70·6	85·8[1]	101·4[1]	131·2	+29·4	23
6,975	8,062	9,332	100·0	65·7	64·5	63·7	73·6	85·2	+15·8	24
66,869	67,141	77,132	100·0	87·9	98·3	100·6	101·0	116·1	+14·9	25
31,784	33,700	36,908	100·0	63·6	66·5	66·8	70·9	77·6	+ 9·5	26
2,382	2,545	2,825	100·0	56·1	63·2	70·3	75·2	83·4	+11·0	27
325,517[1]	**368,599[1]**	**458,939**	**100·0**	**59·6**	**74·7**	**85·2[1]**	**96·5[1]**	**120·2**	**+24·5**	

32.—Total Sales and Indexes of Sales of Retail Merchandise

No.	Group and Kind of Business.	Total Sales.		
		1930.	1933.	1934.
		$'000	$'000	$'000
	Apparel Group.			
28	Men's and boys' clothing and furnishings (includes custom tailors)	72,111	44,435	49,901
29	Family clothing stores	42,144	31,582	35,575
30	Women's apparel and accessory stores	69,806	44,699	47,474
31	Shoe stores	35,908	25,989	27,002
	Totals, Apparel Group	**219,969**	**146,705**	**159,952**
	Building Materials Group.			
32	Hardware stores	70,891	42,732	47,917
33	Lumber and building materials	66,201	29,331	34,302
34	Other building materials (including roofing materials)	9,597	3,417	4,054
35	Electrical shops (without radio) Heating and plumbing shops Paint and glass stores	15,548	7,765	8,657
	Totals, Building Materials Group	**162,237**	**83,245**	**94,930**
	Furniture and Household Group.			
36	Furniture stores	41,017	23,073	26,765
37	Household appliance stores	17,798	9,208	10,742
38	Other home furnishings (including floor coverings, curtains, etc.)	8,957	5,006	5,797
39	Radio and music stores	33,894	13,440	15,524
	Totals, Furniture and Household Group	**101,666**	**50,727**	**58,828**
40	**Restaurants, Cafeterias, and Eating Places**	**75,977**	**41,667**	**44,087**
	Other Retail Stores.			
41	Farmers' supplies	45,760	29,160	34,239
42	Book stores	8,837	5,405	5,622
43	Coal and wood yards	86,047	70,384	71,690
44	Drug stores	76,849	57,253	59,458
45	Florists	9,265	5,570	5,905
46	Jewellery stores	26,663	15,044	16,819
47	Office, school, and store supplies and equipment dealers	19,830	10,003	12,269
48	Tobacco stores and stands	30,703	21,586	22,551
49	Government liquor stores	100,694	54,869	56,207
50	Unclassified kinds of business	113,291	69,930	79,700
	Totals, Other Retail Stores	**517,939**	**339,204**	**364,460**

Chain Stores.—During the past decade the chain store has come to occupy an important place in the field of distribution. The Dominion Bureau of Statistics classifies as chains all retail organizations operating four or more branches, excepting departmental concerns. The number of chains reported in any year thus depends not only on the rise or disappearance of firms but also on the number of units operated. As a minimum of four stores is required before a firm is classified as a chain, the

Trade, by Provinces and Kinds of Business, 1930, 1933-37—concluded.

Total Sales.			Indexes of Retail Sales. (1930=100.)						Per Cent Change, 1936-37.	No.
1935.	1936.	1937.	1930.	1933.	1934.	1935.	1936.	1937.		
$'000	$'000	$'000							p.c.	
53.166	56,897	61,289	100·0	61·6	69·2	73·7	78·9	85·0	+ 7·7	**28**
37,702	40,208	43,452	100·0	74·9	84·4	89·5	95·4	103·1	+ 8·1	**29**
47,565	49,676	52,318	100·0	64·0	68·0	68·1	71·2	74·9	+ 5·3	**30**
27,431	28,592	30,253	100·0	72·4	75·2	76·4	79·6	84·3	+ 5·8	**31**
165,864	**175,373**	**187,312**	**100·0**	**66·7**	**72·7**	**75·4**	**79·7**	**85·2**	**+ 6·8**	
50,043	53,972	59,741	100·0	60·3	67·6	70·6	76·1	84·3	+10·7	**32**
36,904	42,306	46,399	100·0	44·3	51·8	55·7	63·9	70·1	+ 9·7	**33**
4,495	5,518	6,360	100·0	35·6	42·2	46·8	57·5	66·3	+15·3	**34**
9,125	10,207	11,615	100·0	49·9	55·7	58·7	65·6	74·7	+13·8	**35**
100,567	**112,003**	**124,115**	**100·0**	**51·3**	**58·5**	**62·0**	**69·0**	**76·5**	**+10·8**	
29,229	32,231	37,824	100 0	56·3	65·3	71·3	78·6	92·2	+17·4	**36**
12,454	13.424	15,752	100·0	51·7	60·4	70·0	75·4	88·5	+17·3	**37**
5,872	6,779	7,650	100·0	55·9	64·7	65·6	75·7	85·4	+12·8	**38**
17,516	19,589	21,961	100·0	39·7	45·8	51·7	57·8	64·8	+12·1	**39**
65,071	**72,023**	**83,187**	**100·0**	**49·9**	**57·9**	**64·0**	**70·8**	**81·8**	**+15·5**	
45,825	**48,762**	**51,940**	**100·0**	**54·8**	**58·0**	**60·3**	**64·2**	**68·4**	**+ 6·5**	40
35,309	38.282	45,320	100·0	63·7	74·8	77·2	83·7	99·0	+18·4	**41**
5,898	6,283	7,035	100·0	61·2	63·6	66·7	71·1	79·6	+12·0	**42**
72,486	75,959	78,840	100·0	81·8	83·3	84·2	88·3	91·6	+ 3·8	**43**
61,353	64,055	68,724	100·0	74·5	77·4	79·8	83·4	89·4	+ 7·3	**44**
6,097	6,448	7,114	100·0	60·1	63·7	65·8	69·6	76·8	+10·3	**45**
18.238	19,866	21,943	100·0	56·4	63·1	68·4	74·5	82·3	+10·5	**46**
13,746	15,656	18,599	100·0	50·4	61·9	69·3	79·0	93·8	+18·8	**47**
23,129	24,501	26,605	100·0	70·3	73·4	75·3	79·8	86·7	+ 8·6	**48**
56,830	65,908	74,305	100·0	54·5	55·8	56·4	65·5	73·8	+12·7	**49**
81,690	85,860	97,332	100·0	61·7	70·3	72·1	75·8	79·9	+ 5·4	**50**
374,776	**402,818**	**445,817**	**100·0**	**65·5**	**70·4**	**72·4**	**77·8**	**86·1**	**+10·7**	

reduction in branches below this number automatically removes a firm from the chain store group. In an effort to obtain some comparative information for chain stores, a careful check was made of census and other records for the year 1923. The data secured do not provide complete figures for chain stores in the early year, but the figures in Table **33** give some indication of the growth in chain stores between 1923 and 1930 for the trades in which chains hold important positions.

33.—Numbers of Chains and Chain Stores in Selected Kinds of Business, 1923, 1930, 1936, and 1937.

Kind of Business.	1923.[1]		1930.		1936.		1937.	
	Chains.	Chain Stores.	Chains.	Chain Stores.	Chains.	Chain Stores.	Chains.	Chain Stores.
Candy and confectionery	6	65	14	163	10	177	10	186
Grocery and combination	32	640	66	2,004	75	2,079	75	2,024
Meat markets	13	154	21	214	14	150	14	155
Dry goods	4	18	10	94	5	58	7	62
Variety, 5-and-10, and to-a-dollar	3	122	15	313	14	396	14	422
Automobile dealers	4	36	10	76	4	35	4	29
Filling stations	5	177	28	646	28	503	22	255
Men's and boys' clothing and furnishings (including tailors)	8	68	22	176	16	154	16	147
Family clothing	1	4	13	55	14	73	14	73
Women's apparel and accessories (including millinery)	5	37	28	183	21	172	19	176
Shoes	5	35	17	193	25	320	25	337
Hardware	8	37	13	70	13	67	13	68
Furniture	2	51	8	90	6	63	7	69
Radio and music	5	51	7	73	5	29	5	32
Drugs	22	193	31	284	30	314	31	320
Jewellery	1	6	3	23	3	32	4	36
Office equipment	10	75	16	171	12	141	12	142
Tobacco	9	159	9	210	9	215	9	212
Sub-Totals	143	1,928	331	5,038	304	4,978	301	4,745
Lumber and building materials	49	1.012	46	1,018	37	807	35	796
Totals	**192**	**2,940**	**377**	**6,056**	**341**	**5,785**	**336**	**5,541**

[1] Incomplete figures, see text on pp. 612-613.

The sales of chain stores formed 17·7 p.c. of the total retail merchandise trade in 1930 and 16·9 p.c. in 1937. Grocery and combination store chains had 29·5 p.c. of the total sales for these businesses in 1930 and 33·5 p.c. in 1937. The proportion of chain sales to total sales in some other important lines of trade for the year 1937 were: shoe stores, 33·4 p.c.; drug stores, 20·6 p.c.; and furniture stores 15·0 p.c. Summary figures for all chain stores in Canada are given in Table 34.

34.—Principal Statistics for Chain Stores, 1930-37.

Year.	Chains.	Chain Stores (average number).	Value of Sales.	Year.	Chains.	Chain Stores (average number).	Value of Sales.
	No.		$		No.		$
1930	518	8,097	487,336,000	1934	445	7,804	347,186,100
1931	506	8,188	434,199,700	1935	445	7,666	364,129.800
1932	486	8,066	360,806,200	1936	457	7,588	394,935.000
1933	461	7,900	328,902,600	1937	447	7,346	414,133,300

Retail Sales of New Motor Vehicles in Canada.*—Statistics on new motor vehicle sales in Canada are collected monthly from Canadian manufacturers and assemblers, and from manufacturers in the United States of vehicles made for sale in this country. Number of units sold and retail value of sales are both reported. The retail value is the price paid by an individual purchaser at the Canadian point of manufacture and includes sales and excise taxes, charges for standard accessories, dealers' commissions, etc. Freight charges from factory to place of purchase are excluded. Duty is included in the retail value of sales of imported cars.

---

* For statistics of numbers of motor vehicles registered in Canada and apparent consumption of motor vehicles, see pp. 663-664.

The automotive trade is much more sensitive than most branches of retail business to fluctuations in consumer purchasing power. Sales of new motor vehicles in 1938 were down 15·9 p.c. in number and 9·3 p.c. in value from the preceding year but were still 7·1 p.c. in number and 15·1 p.c. in value above the figures for 1936. Declines below 1937 were about the same for passenger and commercial vehicles, percentage changes in point of view of number of units sold being 16·0 p.c. for the former and 15·7 p.c. for the latter series.

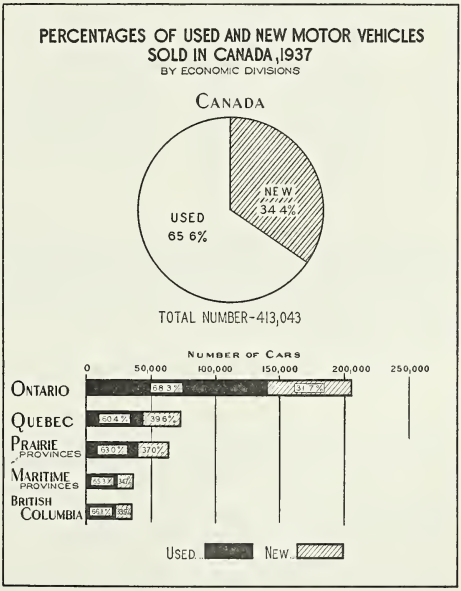
35.—Retail Sales of New Motor Vehicles in Canada, calendar years 1932-38, with Total Value for 1930.

Note.—The first year for which details are available is 1932. The total value for 1930 was secured in connection with the Census of Merchandising and Service Establishments.

Year.	Passenger Cars.		Trucks and Buses.		Totals.	
	No.	$	No.	$	No.	$
1930	[1]	[1]	[1]	[1]	[1]	122.165.000
1932	38.621	38.919.015	7,249	6.341.727	45.870	45.260.742
1933	39.568	39.692.630	5 764	5.757.600	45,332	45.450.230
1934	61 503	63.566.402	11.855	12.219.059	73.358	75.785.461
1935	83.242	83.429.114	18.219	18,313.335	101.461	101.742.449
1936	92.287	95.403.199	21.027	22.179.597	113.314	117.582.796
1937	114.275	116.886.334	30,166	32.284.193	144.441	149.170,527
1938[2]	95,751	105.006.462	25.414	30,005.446	121.165	135.011,908

[1] Not available. [2] Subject to revision.

Retail Sales of Used Motor Vehicles in Canada.*—That the sale of a new motor vehicle in Canada means the sale by distributors of two used models is the opinion generally recognized in the automotive trade. The accuracy of this ratio is confirmed by the results of a special survey of the retail automotive trade for 1937 for which reports were secured direct from 3,426 retail distributors of motor vehicles in the country. Dealers and distributors reported a total of 413,043 motor vehicles sold for $245,277,623 in 1937 of which 141,881 were new models which sold for $157,671,890 or an average of $1,111 each and 271,162 were used vehicles which retailed for $87,605,733 or an average of $323 each. The total number of vehicles sold is thus divided in the proportions 34·4 p.c. new and 65·6 p.c. used or, on the average, there were 1·91 used vehicles sold for every new model.



PERCENTAGES OF USED AND NEW MOTOR VEHICLES SOLD IN CANADA, 1937

BY ECONOMIC DIVISIONS

---

* See footnote to p. 614.

The ratio of used to new vehicles sold varies considerably for different regions of the country, usually being higher in those sections in which the concentration of motor vehicles in proportion to population is greatest and lower in those sections in which there are fewer used vehicles available to be traded in as part payment for new models. The ratio of used to new models sold ranged from 1·53 in Quebec province where the population per motor vehicle registration is highest to 2·16 in Ontario where the population per motor vehicle registration is lowest.

36.—Numbers and Values of New and Used Motor Vehicles Sold in Canada, by Provinces, 1937.

Province.	New Vehicles.[1]				Used Vehicles.				Totals, All Vehicles.	
	No.	Per Cent of Total.	Value.	Per Cent of Total Value.	No.	Per Cent of Total.	Value.	Per Cent of Total Value.	No.	Value.
			$				$			$
P.E.I......	801	37·8	800,271	67·3	1,317	62·2	388,864	32·7	2,118	1,189,135
N.S........	6,692	33·4	7,149,675	62·4	13,367	66·6	4,314,397	37·6	20,059	11,464,072
N.B.......	5,035	36·1	5,731,171	67·1	8,917	63·9	2,804,589	32·9	13,952	8,535,760
Que........	28,845	39·6	33,484,753	69·7	44,052	60·4	14,516,781	30·3	72,897	48,001,534
Ont........	65,071	31·7	70,154,811	61·7	140,268	68·3	43,516,558	38·3	205,339	113,671,369
Man.......	7,579	38·4	8,251,780	66·6	12,141	61·6	4,148,078	33·4	19,720	12,399,858
Sask.......	6,600	38·4	6,978,234	65·7	10,603	61·6	3,643,503	34·3	17,203	10,621,737
Alta.......	9,306	35·1	10,558,061	65·0	17,210	64·9	5,679,620	35·0	26,516	16,237,681
B.C........	11,952	33·9	14,563,134	62·9	23,287	66·1	8,593,343	37·1	35,239	23,156,477
Totals...	**141,881**	**34·4**	**157,671,890**	**64·3**	**271,162**	**65·6**	**87,605,733**	**35·7**	**413,043**	**245,277,623**

[1] Returns from individual dealers for the special survey showed 141,881 new motor vehicles sold for $157,671,890 in 1937 whereas retail deliveries for the same year as reported by the manufacturers and shown in Table 35 are 144,441 units sold for $149,170,527. The greater number reported by the manufacturers is to some extent an indication of the incompleteness of coverage of the dealers' reports. It is partially due to the fact that while the manufacturers' reports covered the calendar year some of the dealers' returns covered a fiscal period ended in the spring of 1938 when sales were below the level of the corresponding period in 1937. Value figures reported by dealers were based on total selling price including freight charges whereas freight charges were omitted from the manufacturers' reports. This accounts for the difference in the value figures in the two series.

Financing of Motor Vehicle Sales in Canada.*—Financing corporations play an important part in the retail distribution of both new and used motor vehicles in Canada. They extend credit facilities to customers who could not enter the market if required to pay with cash and to others who, though in a position to pay cash, find it more convenient to budget their expenditures on the instalment basis. They also provide a service to the motor dealers by assuming the risks and inconveniences connected with instalment sales, thus permitting the dealers to operate on a smaller capital outlay than would otherwise be necessary.

Statistics on financing are compiled monthly from returns secured from all large finance companies in Canada which are engaged in purchasing accounts, contracts, or notes arising out of retail sales of motor vehicles. Aggregates of the monthly data show that sales of 162,703 motor vehicles (including both new and used models) were financed to the extent of $69,685,853 in 1938. These figures reveal decreases of 8·5 p.c. in number and 8·1 p.c. in amount from the 177,898 vehicles which were financed for $75,850,173 in 1937. New vehicles numbering 45,267 were financed for $33,701,624 or an average of $745 each. There were also 117,436 used vehicles whose sales were financed to the extent of $35,984,229 or for $306 each.

---

* See footnote to p. 614.

A comparison of sales and financing of new motor vehicles is shown in Table **37**; 37·4 p.c. of all new motor vehicle sales in Canada in 1938 passed through the hands of financing corporations. The corresponding amount of financing amounted to 25·0 p.c. of the total selling value of all new models. Total sales of used vehicles are known only for 1937. In that year 44·9 p.c. of all used vehicle purchases were financed by these finance corporations.

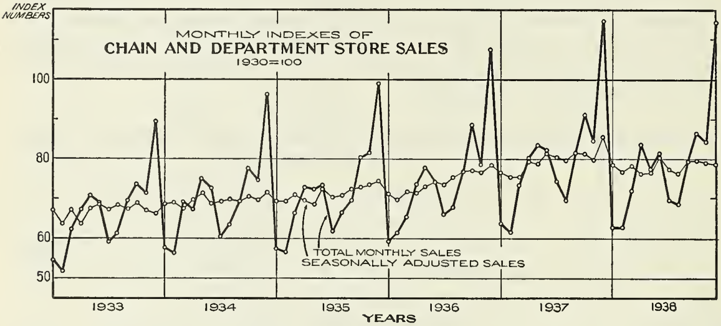
37.—Comparison of Sales and Financing of New Motor Vehicles in Canada, 1932-38.

Year.	New Vehicles Sold.		New Vehicles Financed.			
			Units.		Financing.	
	Number of Units.	Retail Value.	Number.	Per Cent of Total Sold.	Amount.	Per Cent of Total Sales.
		$			$	
1932	45,870	45,260,742	21,293	46·4	12,741,179	28·2
1933	45,332	45,450,230	15,880	35·0	10,030,368	22·1
1934	73,358	75,785,461	23,264	31·7	16,364,735	21·6
1935	101.461	101,742,449	31,950	31·5	22,410,656	22·0
1936	113,314	117,582,796	42,863	37·8	29,887,861	25·4
1937	144,441	149,170,527	56,247	38·9	40,664,675	27·3
1938[1]	121,165	135,011,908	45,267	37·4	33,701,624	25·0

[1] Subject to revision.

Monthly Indexes of Retail Sales.—In recent years the Dominion Bureau of Statistics has published monthly indexes of the dollar value of retail sales based upon reports received from department stores, from chain organizations, and from a number of independent firms operating in twelve lines of business. While these reports cover only a part of the field and relate mainly to the business of department and chain stores, they embrace a sufficiently large number of stores to provide a fairly accurate indication of the current movements in retail sales for the kinds of business which are included.

Two sets of figures are shown for the general indexes of retail trade in Table **38**; in the first set no adjustments have been made, while in the second, corrections are incorporated to allow for the variations in number of business days and for seasonal influences. This general index of retail sales shows that the low point in retail trade was reached in the early part of 1933. Following this there was a gradual improvement in the dollar volume of sales until December, 1937, when an exceptionally heavy Christmas business brought the seasonally adjusted index to the highest level recorded since the summer of 1931. Retail trade in Canada for the year 1938 was maintained at a level only slightly below that of 1937. Following the high peak in December, 1937, there was a falling-off in sales until the months of April and May when the seasonally adjusted composite index for the twelve lines of business included in the survey stood 4 p.c. below the 1937 average. Substantial improvement in June was followed by a drop in July and August. A gain in September has been maintained, the general index adjusted for seasonal variations moving horizontally until the end of the year with the result that dollar sales for the twelve lines of business included in the index stand only 2 p.c. below the 1937 average. The chart illustrates the trends of the unadjusted and adjusted indexes more readily than the figures.



The indexes of retail sales for the individual lines of business mentioned in Table 39 are corrected to allow both for variations in the number of business days in different months and for usual seasonal influences.

38.—Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Months, 1929, 1930, 1933, and 1935-38.

NOTE.—The general indexes are composite figures secured by weighting the indexes of sales for the twelve kinds of business in proportion to their relative position in the total trade.

(Average for 1930=100.)

Month.	Unadjusted Indexes.							Adjusted Indexes.						
	1929.	1930.	1933.	1935.	1936.[1]	1937.[1]	1938.[2]	1929.	1930.	1933.	1935.	1936.[1]	1937.[1]	1938.[2]
Jan.	94·7	93·7	54·7	57·2	59·2	63·6	62·7	111·8	110·0	66·9	69·3	71·1	76·4	78·6
Feb.	91·4	86·8	51·9	56·5	61·3	61·7	62·7	112·2	106·5	63·7	69·3	69·9	75·7	76·8
Mar.	110·0	94·7	62·1	66·2	65·2	73·7	72·0	111·0	102·7	66·9	71·0	71·8	75·7	78·2
Apr.	109·8	107·8	67·6	72·9	73·9	80·2	84·0	110·2	102·4	63·7	69·5	71·2	79·3	76·2
May	115·2	109·1	70·9	72·5	77·9	83·7	77·7	108·8	102·3	67·6	68·3	72·8	78·9	76·2
June	111·1	97·4	69·1	73·4	74·6	82·4	81·4	109·2	99·6	68·6	72·1	74·1	81·5	80·1
July	103·2	90·3	59·1	61·9	66·0	74·2	69·3	114·3	99·6	67·4	70·2	73·9	80·4	77·6
Aug.	107·3	90·2	61·3	66·4	67·9	69·4	68·4	114·4	99·2	68·2	70·7	75·3	79·9	76·4
Sept.	109·7	97·3	69·9	69·5	76·1	81·7	79·7	114·2	98·2	67·3	72·3	76·5	81·8	79·3
Oct.	126·7	107·8	73·7	80·4	88·6	91·2	85·9	114·3	96·6	68·9	72·5	76·7	81·4	79·4
Nov.	119·7	98·6	71·4	81·5	78·5	84·6	84·1	108·3	92·5	67·0	73·6	76·4	79·9	79·2
Dec.	139·1	126·3	89·4	98·9	107·3	115·0	114·0	107·8	95·1	66·0	74·4	78·2	85·8	79·0
Annual Averages.	**111·5**	**100·0**	**66·8**	**71·4**	**74·7**	**80·1**	**78·5**	**111·4**	**100·4**	**66·9**	**71·1**	**74·0**	**79·7**	**78·1**

---

[1] Recalculated to allow for revisions in sub-indexes.

[2] Subject to revision.

39.—Adjusted Index Numbers of Retail Sales Based on Monthly Reports of Department and Chain Stores, by Kinds of Business, January, 1936, to December, 1938

NOTE.—The indexes are compiled from the returns of 36 departmental organizations and 160 chain companies operating more than 3,300 stores and a number of independents in those lines of business where chains are of minor importance. The indexes are adjusted for variations in number of stores operated, for number of business days in each month, and for seasonal variations.

(Average for 1930=100.)

Year and Month.	Boots and Shoes.	Candy.	Clthg. Men's.	Clthg. Women's.	Department.	Drugs.	Furniture.	Groceries and Meats.	Hardware.	Music and Radio.	Restaurants.	Variety.
1936.[1]												
Jan.	74·0	58·6	69·6	59·6	71·3	73·8	70·3	79·7	68·3	53·9	53·0	84·7
Feb.	74·4	66·8	69·3	57·3	73·0	74·6	71·1	77·8	69·9	51·3	53·0	82·0
Mar.	78·1	57·2	69·2	57·7	72·0	73·5	70·6	80·8	74·2	51·9	54·0	81·8
Apr.	73·8	65·5	69·3	61·6	69·8	75·9	75·5	74·7	75·0	52·6	51·9	90·5
May	80·0	58·2	69·4	61·0	73·8	75·1	74·8	75·3	75·4	52·7	52·3	88·3
June	74·6	61·0	69·8	59·9	70·6	73·1	76·2	77·7	75·7	50·1	52·6	90·9
July	73·7	57·7	70·2	59·8	74·7	75·6	79·3	77·1	74·3	53·1	53·0	88·7
Aug.	75·1	57·8	71·5	59·4	76·6	73·5	79·9	79·6	78·6	52·7	53·2	89·6
Sept.	75·1	60·4	71·7	59·7	77·8	75·8	78·3	79·3	76·0	54·4	53·4	91·1
Oct.	78·2	59·8	72·7	59·5	77·2	77·8	87·0	77·6	77·8	56·6	52·9	92·2
Nov.	84·6	57·5	75·7	60·1	76·6	76·5	85·9	79·4	80·9	57·8	56·6	92·7
Dec.	69·7	61·0	72·5	59·8	78·6	80·4	89·5	83·2	75·7	58·1	57·6	92·0
Averages, 1936.	**75·9**	**60·1**	**70·9**	**59·6**	**74·3**	**75·5**	**78·2**	**78·5**	**75·2**	**53·8**	**53·6**	**88·7**
1937.[1]												
Jan.	79·1	55·6	75·0	63·5	78·2	79·4	88·8	82·5	82·4	60·7	55·8	95·1
Feb.	85·5	65·2	75·7	65·0	78·1	81·1	87·4	82·9	80·2	62·2	57·3	92·9
Mar.	70·3	65·2	75·1	64·6	76·6	79·2	88·9	87·0	86·2	62·1	57·8	96·9
Apr.	78·6	56·9	75·1	60·7	77·8	78·5	84·0	83·6	87·0	61·0	56·2	89·8
May	77·0	61·5	76·3	61·4	79·2	78·3	88·4	83·5	85·2	61·0	53·4	95·9
June	79·2	59·5	76·9	62·8	77·5	77·8	93·3	86·0	87·5	63·6	53·6	98·2
July	81·2	55·9	78·1	62·8	80·1	79·0	93·2	85·3	86·1	60·9	53·4	95·9
Aug.	78·2	52·4	77·3	63·3	80·3	80·7	87·6	85·0	86·6	61·4	54·8	93·1
Sept.	83·0	60·3	78·2	62·8	79·6	80·9	87·6	88·4	87·4	59·4	54·9	95·4
Oct.	85·2	60·1	76·9	63·5	79·5	83·4	89·7	86·7	82·6	57·4	55·3	96·6
Nov.	71·3	58·5	75·6	62·5	79·9	78·3	91·9	86·3	81·8	56·6	58·3	94·1
Dec.	85·8	64·8	78·1	63·2	82·4	85·2	90·5	99·8	80·8	55·9	55·0	100·2
Averages, 1937.	**79·5**	**59·7**	**76·5**	**63·0**	**79·1**	**80·2**	**89·3**	**86·4**	**84·5**	**60·2**	**55·5**	**95·3**
1938.												
Jan.	86·2	53·0	80·4	68·6	78·1	77·8	84·8	85·9	95·9	61·1	53·8	99·3
Feb.	77·7	63·8	72·8	66·4	76·9	74·9	81·1	88·0	90·5	55·5	55·3	92·6
Mar.	76·9	51·7	70·9	61·4	75·5	76·6	73·4	91·3	85·0	57·2	55·0	86·5
Apr.	75·5	57·6	72·5	63·3	75·9	76·6	76·6	85·6	87·0	61·3	52·0	95·1
May	64·0	57·2	65·3	56·7	73·5	77·6	78·8	88·1	83·6	55·8	51·8	89·7
June	76·6	57·5	71·4	59·2	74·4	76·7	78·0	90·8	88·2	55·2	50·3	92·6
July	77·0	54·9	70·7	56·6	75·3	76·0	74·7	86·7	86·5	55·4	50·4	89·6
Aug.	68·6	48·5	68·6	60·6	74·7	76·7	71·6	85·5	88·3	57·1	51·6	87·1
Sept.	80·3	56·3	71·8	60·6	76·8	80·3	72·9	88·8	83·2	54·4	51·3	94·0
Oct.	76·6	54·0	67·0	58·7	77·3	80·5	83·9	86·9	89·0	55·3	51·4	96·0
Nov.	74·2	53·0	69·7	60·7	78·5	79·8	81·3	87·7	88·4	47·8	53·7	92·3
Dec.	62·1	60·4	65·5	56·4	78·6	82·6	84·6	87·8	84·0	55·8	51·1	89·1
Averages, 1938.	**74·6**	**55·7**	**70·6**	**60·8**	**76·3**	**78·0**	**78·5**	**87·8**	**87·5**	**56·0**	**52·3**	**92·0**

[1] Figures for 1936 and 1937 were recalculated since the publication of the 1938 Year Book to allow for revisions in sub-indexes.

Motion Picture Statistics.—The motion picture has become the most popular form of public entertainment and the business of satisfying the demand for such amusement has assumed a corresponding importance. In 1930 the expenditure on motion picture entertainment (exclusive of amusement taxes) was $3·77 per capita. By 1933, due to reduced patronage and lower prices of tickets, the per capita expenditure had dropped to $2·33, while for 1935 the figure rose slightly to $2·50. In 1936 there was a further increase to $2·70 and in 1937 it rose again to $2·93.

Statistics for motion picture theatres in Canada were secured for the first time in connection with the Census of Merchandising and Service Establishments, 1931. According to the results of this census, there were 910 motion picture theatres in operation in 1930. During the depression a number of theatres were closed so that in 1933 only 765 were reported. During the following three years some recovery took place, 797 theatres being reported in operation in 1934, 862 in 1935, 959 in 1936 and 1,047 in 1937. Summary figures of motion picture theatres by provinces for 1930, 1936, and 1937 are given in Table **40** and the principal statistics by leading cities for 1936 and 1937 in Table **41.**

40.—Motion Picture Theatres, Employees, Salaries and Wages, and Total Receipts, by Provinces, 1930, 1936, and 1937.

NOTE.—Figures for intervening years will be found in the corresponding table of previous editions of the Year Book.

Year and Province.	Theatres.	Employees.		Salaries and Wages.	Total Receipts.
		Male.	Female.		
	No.	No.	No.	$	$
1930.					
Prince Edward Island	5	16	21	28,200	188,300
Nova Scotia	56	198	69	204,400	1,814,500
New Brunswick	39	129	77	160,700	1,093,400
Quebec	148	1,126	299	1,593,600	8,301,800
Ontario	324	1,881	556	2,826,200	15,900,900
Manitoba	73	322	143	536,900	2,712,800
Saskatchewan	104	223	80	340,400	1,977,300
Alberta	85	307	72	428,700	2,323,700
British Columbia[1]	76	439	185	827,600	4,166,800
Canada	**910**	**4,641**	**1,502**	**6,946,700**	**38,479,500**
1936.					
Prince Edward Island	4	14	9	11,100	103,200
Nova Scotia	55	241	86	196,800	1,217,600
New Brunswick	34	133	59	115,300	775,400
Quebec	154	1,012	300	842,100	6,245,200
Ontario	325	2,101	520	2,154,800	12,888,400
Manitoba	77	333	176	334,900	2,007,100
Saskatchewan	123	296	86	226,800	1,369,300
Alberta	87	332	68	347,900	1,734,100
British Columbia[1]	100	499	254	699,000	3,270,000
Canada	**959**	**4,961**	**1,558**	**4,928,700**	**29,610,300**
1937.[2]					
Prince Edward Island	4	14	11	13,300	110,300
Nova Scotia	54	219	98	199,400	1,298,600
New Brunswick	34	135	65	122,600	821,300
Quebec	166	1,078	323	961,100	6,749,700
Ontario	349	2,261	562	2,520,900	14,457,000
Manitoba	90	396	191	386,100	2,196,400
Saskatchewan	123	292	81	242,700	1,351,000
Alberta	127	374	82	393,600	1,880,000
British Columbia[1]	100	525	243	787,600	3,635,000
Canada	**1,047**	**5,294**	**1,656**	**5,627,300**	**32,499,300**

[1] Includes Yukon and Northwest Territories.

[2] Subject to revision.

41.—Principal Statistics for Motion Picture Theatres, by Provinces and Cities, 1936 and 1937.

NOTE.—Figures for 1937 are subject to revision.

Province and City.	Theatres.		Seating Capacity, 1937.	Receipts.[1]		Percentage Change.	Admissions, 1937.	
	1936.	1937.		1936.	1937.		Number.	Average Price.[2]
	No.	No.	No.	$	$	p.c.	'000	cts.
Prince Edward Island	**4**	**4**	**2,414**	**103,200**	**110,300**	+ 6·9	**396**	**27·9**
Nova Scotia.								
Halifax	7	8	7,061	404,000	424,700	+ 5·1	1,771	24·0
Other places	48	46	23,802	813,600	873,900	+ 7·4	3,851	22·7
Totals, Nova Scotia	**55**	**54**	**30,863**	**1,217,600**	**1,298,600**	+ 6·7	**5,622**	**23·1**
New Brunswick.								
Saint John	7	7	6,150	312,900	302,700	− 3·3	1,581	19·1
Other places	27	27	12,116	462,500	518,600	+12·1	2,177	23·8
Totals, New Brunswick	**34**	**34**	**18,266**	**775,400**	**821,300**	+ 5·9	**3,758**	**21·9**
Quebec.								
Montreal[3]	62	66	69,406	4,797,300	4,922,100	+ 2·6	22,329	22·0
Quebec	11	11	8,436	438,900	492,000	+12·1	2,286	21·5
Three Rivers	4	4	3,235	119,000	127,100	+ 6·8	491	25·9
Other places	77	85	34,526	890,000	1,208,500	+35·8	4,487	26·9
Totals, Quebec	**154**	**166**	**115,603**	**6,245,200**	**6,749,700**	+ 8·1	**29,592**	**22·8**
Ontario.								
Toronto	102	105	85,799	5,198,300	5,653,300	+ 8·8	22,711	24·9
Hamilton	18	19	17,937	885,000	976,300	+10·3	4,286	22·8
Ottawa	12	13	12,524	888,900	904,900	+ 1·8	3,965	22·8
London	7	8	8,149	467,400	504,400	+ 7·9	1,939	26·0
Windsor	8	8	8,202	409,300	515,400	+25·9	2,238	23·0
Other places	178	196	109,256	5,039,500	5,902,700	+17·1	22,294	26·5
Totals, Ontario	**325**	**349**	**241,867**	**12,888,400**	**14,457,000**	+12·2	**57,434**	**25·2**
Manitoba.								
Winnipeg	32	37	31,297	1,592,000	1,785,400	+12·1	7,812	22·9
Other places	45	53	17,131	415,100	411,000	− 1·0	1,846	22·3
Totals, Manitoba	**77**	**90**	**48,428**	**2,007,100**	**2,196,400**	+ 9·4	**9,658**	**22·7**
Saskatchewan.								
Regina	5	5	4,424	352,000	359,000	+ 2·0	1,354	26·5
Saskatoon	5	5	4,266	295,600	277,200	− 6·2	1,226	22·6
Moose Jaw	4	3	2,012	133,700	125,100	− 6·4	504	24·8
Other places	109	110	31,777	588,000	589,700	+ 0·3	2,217	26·6
Totals, Saskatchewan	**123**	**123**	**42,479**	**1,369,300**	**1,351,000**	− 1·3	**5,302**	**25·5**
Alberta.								
Calgary	10	11	8,029	557,900	553,500	− 0·8	2,178	25·4
Edmonton	8	8	6,546	607,000	632,600	+ 4·2	2,466	25·6
Other places	69	108	28,259	569,200	693,900	+21·9	2,587	26·8
Totals, Alberta[4]	**87**	**127**	**42,834**	**1,734,100**	**1,880,000**	+ 8·4	**7,231**	**26·0**
British Columbia.								
Vancouver	31	29	27,977	1,850,100	2,036,900	+10·1	9,131	22·3
Other places[5]	69	71	30,880	1,419,900	1,598,100	+12·6	6,251	25·6
Totals, British Columbia[5]	**100**	**100**	**58,857**	**3,270,000**	**3,635,000**	+11·2	**15,382**	**23·6**
Canada	**959**	**1,047**	**601,611**	**29,610,300**	**32,499,300**	+ 9·8	**134,374**	**24·2**

---

[1] Not including amusement taxes. [2] Total receipts divided by number of admissions. No corrections are made for juvenile attendance, matinee, and evening prices, etc. [3] Includes Lachine, Verdun, Westmount, and Outremont. [4] The increase in number of theatres in Alberta is due to the inclusion of places previously listed as itinerant halls, which are now permanently-equipped buildings. [5] Includes Yukon and Northwest Territories.

Section 10.—Control and Sale of Alcoholic Liquors and Beverages in Canada.*

During the years 1916 and 1917, as a War policy, legislation prohibiting the sale of alcoholic liquors, except for medicinal and scientific purposes, was passed in all the provinces except Quebec, where similar legislation was passed in 1919. The prohibition extended to the sale of beer and wine except in Quebec. Native wine, however, could be sold in Ontario.

In aid of provincial legislation prohibiting or restricting the sale of intoxicating liquors, the Dominion Government, in 1916, passed a law making it an offence to send intoxicating liquors into any province to be dealt in contrary to the law of that province. In 1919 this Act was changed to read that "on the request of the Legislative Assembly of a province a vote would be taken on the question that the importation and the bringing of intoxicating liquors into such province be forbidden". If the majority of those voting were found to be in favour of such prohibition, the Governor in Council was to declare it in force.

After the War the provinces continued under prohibition for varying periods. Plebiscites were taken from time to time to ascertain the will of the electorate as to whether the policy of prohibition, adopted as an emergency War measure, should be continued. During 1921 Quebec and British Columbia discarded the existing prohibition laws and adopted the policy of liquor sale under government control. The same course was followed by Manitoba in 1923, Alberta in 1924, Saskatchewan in 1925, Ontario and New Brunswick in 1927, and Nova Scotia in 1930. Thus Prince Edward Island is the only province still adhering to a policy of prohibition.

The provincial Liquor Control Acts have been framed to conform to conditions peculiar to the regions where they are in force and no two are exactly alike. The salient feature of all is the establishment of a provincial monopoly of the retail sale of alcoholic beverages, with the practical elimination of private profit therefrom. Partial exception is made in the retail sale of malt liquor by brewers, which certain provinces permit while reserving regulative rights and taxing such sales heavily. In all the provinces, however, spirits may be bought only at government liquor stores. The provincial monopoly extends only to the retail sale of alcoholic beverages, the manufacture being still in private hands but under the supervision of the Liquor Boards or Commissions. The original Liquor Control Acts have been modified from time to time as deemed advisable. Brief summaries of the legislation are given in the Bureau's annual report on the Control and Sale of Liquor.

Sales by Liquor Control Boards.—Data on gross sales, other revenue, and net profits of the provincial Liquor Boards, are tabulated in Table 42. In connection with the figures on gross sales it is essential to note that for Quebec, Manitoba, and for Alberta (prior to Apr. 1, 1936), the sales of beer made directly by the brewers to the licensees are not included. The proceeds from such sales do not pass through the Boards, but the purchasers must pay through the brewers to the Boards a tax equal to 5 p.c. of the purchases in the case of Quebec, and 12½ cents per gallon in Manitoba. In Alberta purchasers from the brewers paid a tax of 12½ cents per gallon prior to Apr. 1, 1932, and 15½ cents per gallon thereafter to Apr. 1, 1936.† For Manitoba and Alberta, it is possible to calculate from the taxes the gallonage of beer sold but the corresponding values are not available.

---

* Abridged from the report "The Control and Sale of Liquor in Canada", by Miss L. J. Beehler, M.A., published by the Dominion Bureau of Statistics.

† An amendment to the Alberta Liquor Control Act passed at the 1936 session of the Legislature provides that "brewers who manufacture beer in Alberta may sell only to the Liquor Board". All sales, both to beer licensees and to permit holders, are now made only through the Board. Under the new arrangement the gallonage tax is no longer levied.

For Quebec, the quantity and value of sales are published by the Liquor Commission, as shown in the footnote to Table 42.

It should be noted that the values, as given, do not represent the sales values to the final consumers as, in most provinces, the sale of beer by the glass is permissible. Further, all the liquor sold in any province is not consumed by the residents of that province. The tourist traffic is an important factor in this connection.

All the revenue resulting from the Liquor Control Acts is not paid to the Liquor Boards. In certain provinces, permit fees are paid directly to the governments and do not pass through the Boards. Table 42 further indicates the total revenue accruing to the governments through the control of liquor sales.

The reports of the Boards do not in all cases show the quantities of liquors sold; in comparing values for a series of years or between provinces it should be borne in mind that price variations may be an important factor.

Apparent Consumption of Liquor in Canada.—It is not possible to obtain accurate figures on Canadian consumption of liquor. Except in Nova Scotia, Quebec, Ontario, and Alberta, the Liquor Boards do not publish figures to show sales on a gallonage basis, and even were such data on quantity sales available for all provinces they would not necessarily represent total consumption. For example, the quantities consumed by tourists reach a considerable amount. Further, there is no definite information regarding the illegal traffic in liquor, though inquiry has revealed that such illicit business has at times reached fairly large proportions.

In Tables 43, 44, and 45 an attempt has been made to indicate separately the apparent consumption in Canada of spirits, malt liquors, and wines. Obviously, these computations are subject to error for the reasons mentioned above, and also because no consideration has been given to increases or decreases in the quantities held in stock by the Boards or by licensees. For example, owing to exceptionally favourable conditions abroad, the Liquor Boards may in certain years buy heavily to replenish stocks or create reserves; such purchases would unduly weight the apparent consumption figures for these years. The figures in these tables have been arrived at as follows:—

Spirits.—Practically the total production of spirits is placed in bonded warehouses whence it is released for various purposes. The quantities shown as "entered for consumption" are released from warehouse, duty paid, presumably for consumption for beverage purposes in Canada. However, part of these may be exported. The supply of spirits available in Canada for home consumpiton or for export must be the sum of the quantities shown under (*a*) entered for consumption; (*b*) imports; and (*c*) exports in bond, and if the total domestic exports and re-exports of imported goods are deducted from this figure the remainder indicates the apparent consumption in Canada.

Malt Liquors.—Only a small part of the output of malt liquors is placed in warehouses. The available supply is, therefore, made up of (*a*) production; (*b*) changes in warehouse stock; and (*c*) imports. By deducting the domestic exports and re-exports of imported goods from this total supply, a figure showing the apparent consumption in Canada is obtained.

Wines.—The apparent consumption of native wines is obtained by dividing the rates of excise tax into the total tax collections. This is believed to furnish a better measure of consumption than the method formerly used (*i.e.*, subtracting exports from production) since part of the product is not consumed in the year of production but is placed in storage for maturing. The apparent consumption of imported wines is arrived at by deducting from the imports into Canada, the re-exports of foreign supplies.

42.—Gross Sales and Net Profits of Liquor Control Boards, Additional Revenues Paid Directly to Governments, and Total Net Revenue from Liquor Control, 1935-37.

Province.	Year.	Receipts by Liquor Control Boards or Commissions.			Additional Amounts for Permits, etc., Paid Direct to Provincial Governments.	Total Net Revenue from Liquor Control.
		Gross Sales.	Other Revenue.	Net Profits.		
		$	$	$	$	$
Nova Scotia—						
14 months ended Nov. 30	1935	3,806,835	9,025	671,385	25,858	697,243
Year ended Nov. 30	1936	3,831,691	9,314	970,693	25,394	996,087
	1937	4,648,423	48,916	1,285,909	28,085	1,313,994
New Brunswick—year ended Oct. 31	1935	2,375,961	17,756	600,762	Nil	600,762
	1936	2,695,859	19,823	782,742	"	782,742
	1937	3,535,446	19,957	1,104,717	"	1,104,717
Quebec—year ended Apr. 30	1935	11,688.510[1]	1.677,220	6,209,100	Nil	6,209,100
	1936	12,698,163[1]	1,764,770	4,868,400	"	4,868,400
	1937	14,693,171[1]	1,796,414	5,487,018	"	5,487,018
Ontario—year ended Oct. 31	1935	8,110,589[2]	920,686	2,595,881	207,411	2,803,292
Nov. 1—Mar. 31	1936	18,530,658[3]	2,942,605[4]	7,862,719	327,097	8,189,816
Year ended Mar. 31	1937	20,733,368[5]	3,100,231	8,960,601	495,066	9,455,667
Manitoba[6]—year ended Apr. 30	1935	4,208,701[1]	472,991	1,086,028	Nil	1,086,028[6]
	1936	4,539,694[1]	494,108	1,293,288	"	1,293,288[6]
	1937	5,191,393[1]	543,082	1,512,201	"	1,512,201[6]
Saskatchewan—year ended Mar. 31	1935	5,203,864	16,299	1,027,573	1,386	1,028,959
	1936	5,735,355	88,662	1,278,731	1,614	1,280,345
	1937	6,718,218	56,364	1,451,275	1,600	1,452,875
Alberta[6]—year ended Mar. 31	1935	3,224,145[1]	596,815	1,480,365	57,434	1,537,799[6]
	1936	3,726,056[1]	612,027	1,802,206	52,522	1,854,728[6]
	1937	7,660,709[7]	167,368	2,331,869	58,944	2,390,813
British Columbia—year ended Mar. 31	1935	10,195,935	134,860	2,448,042	39,301	2,487,343
	1936	11,169,437	140,544	3,015,904	45,925	3,061,829
	1937	12,746,783	145,073	3,555,429	51,904	3,607,333

---

[1] For Quebec, Manitoba, and Alberta gross sales do not include beer sold direct by the brewers to the licensees. Separate figures on beer are published by the Quebec Liquor Commission, as follows:—

Fiscal Year.	Beer Manufactured and Sold within the Province.		Beer Imported from Ontario.		Beer Exported from the Province.		Tax of 5 p.c. on Gross Sales Paid to Liquor Commission.
	gal.	$	gal.	$	gal.	$	$
1935	18,288,799	13,603,405	1,154,871	963,284	3,617,068	3,315,035	894,086
1936	18,184,161	13,447,882	1,199,265	1,055,081	4,158,107	3,841,168	917,206
1937	18,741,258	14,002,742	1,385,972	1,242,130	4,570,759	3,934,054	958,946

[2] In addition, sales of beer from breweries and brewers' warehouses totalled $9,317,289. Sales of domestic wine direct to customers at wineries and branch sales offices amounted to $557,199. [3] In addition, sales of beer from breweries and brewers' warehouses totalled $29,396,420. Sales of native wines direct to customers from licensed sales offices and, when permitted, from the winery premises amounted to $1,407,933. [4] Revised since the publication of the 1938 Year Book. [5] In addition sales of beer from breweries and brewers' warehouses totalled $31,621,194. Sales of native wines made direct to customers from licensed native wine sales offices and, when permitted, from the winery premises, amounted to $1,660,637. [6] The beer taxes paid to the Boards in Manitoba and Alberta are tabulated below. Boards also pay the beer tax on their purchases from the brewers but the beer sales of the Boards are included in the total gross sales shown above.

Fiscal Year.	Manitoba.		Alberta.
	Tax.	Accrued Tax.	Tax.
	$	$	$
1935	277,099	45,101	445,066
1936	280,173	43,239	459,035
1937	308,515	49,231	Nil

[7] Since Apr. 1, 1936, all beer sales in Alberta have been made through the Liquor Control Board.

43.—Apparent Consumption of Spirits in Canada, fiscal years ended Mar. 31, 1923-38.

Fiscal Year.	Entered for Consumption.[1]	Add Exports in Bond.	Add Imports.	Deduct Re-Exports of Imported Spirits.[1]	Deduct Total Domestic Exports.[1]	Apparent Consumption.
	pf. gal.	pf. gal.	pf. gal.	pf. gal.	pf. gal.	pf. gal.
1923	729,678	315,213	1,193,123	67,283	330,820	1,839,911
1924	899,291	875,699	1,261,541	29,329	991,563	2,015,639
1925	910,316	803,535	1,161,169	10,978	1,008,583	1,855,459
1926	1,082,785	499,007	1,410,637	15,958	1,087,553	1,888,918
1927	1,404,111	571,792	1,587,475	107,282	1,266,692	2,189,404
1928	1,896,357	579,420	2,374,885	185,630	1,460,871	3,204,161
1929	2,016,802	1,143,276	2,604,769	183,889	1,911,634	3,669,324
1930	1,926,063	1,810,197	2,446,800	128,612	2,379,858	3,674,590
1931	1,180,536	2,558,327	1,990,574	19,694	2,630,805	3,078,938
1932	781,612	2,276,137	1,421,214	83	2,016,886	2,461,994
1933	769,527	1,991,994	732,306	45	1,996,113	1,497,669
1934	933,946	2,478,975	718,016	1,238	2,551,030	1,578,669
1935	1,063,928	2,215,332	713,346	45	2,205,249	1,787,312
1936	1,621,286	3,006,544	976,563	54	2,995,181	2,609,158
1937	1,900,714	5,280,885	1,126,440	462	5,289,344	3,018,233
1938	2,302,210	4,620,950	1,305,245	141	4,734,678	3,493,586

[1] Prior to 1933 export figures as given in the trade returns were in imperial gallons. These were converted to proof gallons as follows: Canadian manufacture at 20 under proof; foreign origin at 25 under proof.

44.—Apparent Consumption of Malt Liquors, fiscal years ended Mar. 31, 1923-38.

Fiscal Year.	Production.	Add Quantities Entered for Consumption from Warehouses.	Add Imports.	Deduct Quantities Placed in Warehouses.	Deduct Exports (Domestic).	Deduct Re-Exports of Imported Goods.	Apparent Consumption.
	gal.	gal.	gal.	gal.	gal.	gal.	gal.
1923	36,902,066	2,702	54,241	10,800	1,509,763	1,756	35,436,690
1924	44,080,490	9,789	96,647	172,674	3,192,491	4,326	40,817,435
1925	48,389,995	209,398	91,928	363,548	3,142,048	Nil	45,185,725
1926	52,448,853	344,641	152,255	394,989	3,786,164	"	48,764,596
1927	51,755,840	1,291,954	153,105	1,292,087	4,252,583	12	47,656,217
1928	58,397,913	1,343,986	234,701	1,325,630	3,825,003	388	54,825,579
1929	65,837,410	1,712,615	242,100	1,812,444	4,110,698	634	61,868,349
1930	63,450,516	1,738,663	259,003	1,864,625	1,481,215	2,117	62,100,225
1931	59,073,685	1,831,625	230,995	1,832,803	270,102	4,366	59,029,034
1932	52,297,431	1,977,892	195,664	2,020,540	25,458	Nil	52,424,989
1933	40,664,625	1,491,735	106,587	1,412,309	35,667	"	40,814,971
1934	40,920,623	974,161	93,602	1,324,494	404,939	12	40,258,941
1935	52,078,590	11,176,838	97,572	11,242,518	69,994	302	52,040,186
1936	57,154,948	875,759	88,851	974,329	51,887	Nil	57,093,342
1937	60,308,148	912,436	97,725	1,011,964	112,902	"	60,193,443
1938	67,361,250	765,187	104,778	913,994	156,053	"	67,161,168

45.—Apparent Consumption of Wines in Canada, fiscal years ended Mar. 31, 1923-38.

Fiscal Year.	Native.	Imported.			Apparent Consumption, Native and Imported.
	Apparent Consumption (Estimated from Excise Tax Collections).	Imports.	Less Re-Exports.	Apparent Consumption.	
	gal.	gal.	gal.	gal.	gal.
1923	528,355	359,273	2,663	356,610	884,965
1924	922,715	598,125	540	597,585	1,520,300
1925	806,846	706,717	753	705,964	1,512,810
1926	1,182,775	736,311	1,962	734,349	1,917,124
1927	1,482,686	901,857	19,321	882,536	2,365,222
1928	2,171,887	1,263,438	132,748	1,130,690	3,302,577
1929	2,770,117	1,334,792	195,227	1,139,565	3,909,682
1930	3,920,261	1,365,321	150,056	1,215,265	5,135,526
1931	3,408,973	1,089,897	18,573	1,071,324	4,480,297
1932	3,337,556	900,317	76	900,241	4,237,797
1933	2,478,387	684,082	45	684,037	3,162,424
1934	2,679,619	523,866	5,783	518,083	3,197,702
1935	3,187,504	542,019	1,970	540,049	3,727,553
1936	2,605,602	506,707	61	506,646	3,112,248
1937	2,693,456	472,884	173	472,711	3,166,167
1938	3,120,381	507,669	107	507,562	3,627,943

CHAPTER XVIII.—TRANSPORTATION AND COMMUNICATIONS.

Canada is a country of continental dimensions, nearly 4,000 miles in length from east to west, with its relatively small population of 11,209,000 (estimated population as at June 1, 1938), in the main thinly distributed along the southern strip of its vast area. Different parts of the country are shut off from each other by areas of rough, rocky, forest terrain, such as the region lying between New Brunswick and Quebec, the areas north of lakes Huron and Superior, dividing the industrial region of Ontario and Quebec from the agricultural areas of the prairies and the barriers interposed by the mountains of British Columbia. To such a country with a population so distributed and producing, as do our western agriculturists, mainly for export, or, like our manufacturers, largely for consumption in distant portions of the country itself, cheap transportation is a necessity of life. Before 1850, when the water routes were the chief avenues of transportation and were closed by ice for several months each year, the business of the central portions of the country was reduced to a state of relative inactivity during the winter. The steam railway was required, therefore, for the adequate economic development of Canada, more particularly for linking up with the commercial and industrial world the vast productive areas of the Canadian West, and thus promoting their development. The construction of the Canadian Pacific railway gave to Canada, as an economic unit, length; the building of the newer transcontinental railways has given the country breadth.

Railway transportation, though essential in a country such as Canada, is nevertheless expensive for bulky and weighty commodities, and also for short distances where the cost of repeated handling amounts to more than actual transportation. For bulky freight, new enterprises have been either undertaken or are under consideration for improving water communication, such as the new and deeper Welland canal, the deepening of the St. Lawrence canals and of the channel between Montreal and Quebec, and the development of the Hudson Bay route. For freight movement over moderate distances the motor truck, operating over the growing network of improved highways, is providing an increasing proportion of the service. For inaccessible areas remote from the railways, the aeroplane has established itself commercially and is a valuable addition to other transportation facilities.

In order to appraise the value of each of these agencies of transportation from this viewpoint, this chapter of the Year Book, after treating of government control over agencies of transportation and communication in Part I, deals with the four main agencies, namely, carriers by rail, road, water, and air, in Parts II, III, IV, and V, respectively. In each Part the arrangement is intended to show: (1) the plant, equipment, and facilities available; (2) the cost to the Canadian people; and (3) the traffic carried or services performed, in so far as statistics are available for each agency. Unfortunately this arrangement brings out some rather serious gaps in the information at present available; these are pointed out in the respective Parts.

Scarcely less important, from the social and economic viewpoints, is the development of communications in a country so vast and with population centres so scattered. The Post Office has been a great though little-recognized factor in promoting solidarity among the people of different parts of the Dominion, and this same desirable object is now being further aided by the radio, while telegraphs and telephones have done much to annihilate distance—the rural telephone, in particular, having been of great social and economic benefit in country districts. The press, again, assisted by cheap telegraph and cable rates and by low second-class mail rates to all parts of the country, has been helpful in developing national sentiment. These means of communication are dealt with in Parts VI, VII, VIII, and IX.

PART I.—GOVERNMENTAL CONTROL OVER AGENCIES OF TRANSPORTATION AND COMMUNICATION.

Problems of transportation, because they are of such vital importance in the economic life of Canada, occupy a large part of the time and thought of our Parliaments and public men. With the modern development of new forms, it is becoming increasingly important to realize that the several agencies of transportation—carriers by rail, road, water, and air—are, or should be, inter-related parts of an integral whole. Each agency has its place in the efficient provision of necessary transportation in Canada. The problem, therefore, is to adjust the conditions under which each of these agencies operates so that the resulting movement of passengers and freight may be accomplished with the maximum of economic efficiency, that is, at the least possible cost commensurate with desired convenience. The recognition of this growing necessity for viewing the problems of transportation and related communications as parts of a co-ordinated whole is indicated by the organization of the Dominion Department of Transport. This Department was organized on Nov. 2, 1936, under authority of c. 34, 1936, unifying in one Department the control and supervision of railways, canals, harbours, marine and shipping, civil aviation, and radio. The Meteorological Service is also under the Department of Transport.

Private enterprises engaged in the transportation and communications business in Canada, have, in the past 50 years, shown the same tendency toward consolidation and amalgamation which has been evident elsewhere throughout the civilized world. The basic reason for such consolidation and amalgamation has been the fact that the business of transportation and communications is, generally speaking, a 'natural monopoly', *i.e.*, a type of enterprise in which service can be more efficiently and economically rendered to the public where one or a few concerns control a particular type of service throughout the country. The outstanding example of these consolidations in Canada in our time is the concentration of control of the railways of the country in the hands of the Canadian Pacific Railway Company and the Canadian National Railways.

However, since such control brings with it elements of monopoly and possible overcharge which are distasteful to the public, it has been deemed advisable in Canada, as in other countries, to set up authorities controlling the rates to be charged and the other conditions on which services to the public are to be rendered by common carriers. This control eventually, so far as the railways within the jurisdiction of the Dominion Government were concerned, was placed in the hands of the Board of Railway Commissioners, now the Board of Transport Commissioners. From time to time the regulatory authority of the Commission was extended to a limited extent to other utilities. A brief summary of the history and functions of this body follows.

Besides the Board of Transport Commissioners, dealing with the larger public utilities coming under the jurisdiction of the Dominion Government, there exist, in several of the provinces, bodies which undertake among their duties the supervision and control of local public utilities operating under the jurisdiction of the provinces, and the regulation of their rates for service. Among these are the Ontario Department of Municipal Affairs (formerly the Railway and Municipal Board of Ontario, established in 1906), the Quebec Commission of Public Utilities established in 1909, the Nova Scotia Board of Commissioners of Public Utilities, and the Public Utilities Commission of Manitoba. In the three westernmost provinces these same duties are performed by provincial Departments of Railways.

The Board of Transport Commissioners for Canada.*

In the early days of railway building in Canada, the provinces were more concerned with rapid development than with rate regulation. Under the Railway Clauses Consolidation Act of 1851, rates were fixed by the directors of the railway, subject to the approval of the Governor in Council. Beyond this, competition was relied upon to bring rates to a reasonable level. As time went on, however, those who believed in the efficacy of competition as a regulator were disillusioned. For example, complaints were made that the Grand Trunk gave low through transit rates, say from Chicago to New York, through Canada, and recouped itself by high non-competitive rates in Upper Canada. In 1888, the supervision of rates was assigned to the Railway Committee of the Privy Council, sitting in Ottawa.

At the turn of the century, two reports were prepared for the Department of Railways and Canals by Prof. S. J. McLean, the first setting down the experience of railway commissions in England and the United States, and the second discussing Canadian rate grievances, with a recommendation that regulation by commission be adopted in Canada. The second report found that non-competitive rates were exorbitant as compared with competitive rates and that the railways had exercised their right to vary rates without notice, to the great distress of shippers. Among the weaknesses of the Railway Committee as a rate-regulating body was its fixed station at Ottawa, which made the cost of appearing before it practically prohibitive. Besides, members of Parliament had no necessary aptitude for dealing with railway rates, and of their two functions—legislative and administrative—the legislative was to them the more important.

The Board of Railway Commissioners for Canada, as provided for by the amended Railway Act of 1903, was organized on Feb. 1, 1904. In the beginning, its membership consisted of a Chief Commissioner, a Deputy Chief and one Commissioner. In 1908 the membership was increased by the inclusion of an Assistant Chief Commissioner and two other Commissioners. According to the Act, the Board might be divided into two sections of three members but, since any two constituted a quorum, two Commissioners usually heard all but the more important cases, and, agreeing, gave the decision of the Board. By the Transport Act (c. 53, 1938) the name of the Board was changed to the Board of Transport Commissioners for Canada and its powers were extended to cover transport by water and by air, as well as by rail. The new Board has the same number of members and form of organization as outlined above for the former Board.

With regard to transport by rail, the powers of the Board, in brief, cover matters relating to the location, construction, and operation of railways. The most important of these powers has to do with rate regulation. Passenger rates are divided into standard and special, freight rates into standard, special, and competitive. Standard rates are maximum rates and the only ones which must be approved by the Board before they are applied. Special and competitive rates, being less than maximum rates, may be applied by railways without the Board's approval, provided that a change of rates has been advertised. But important rate adjustments usually come to the notice of the Commission, for the changed rate alters the extent of the territory in which a shipper can compete and on this account he is apt to appeal the case to the Commission. It is a knotty problem to mark the boundaries of competitive areas—to decide whether Nova Scotian manufacturers should be given rates which would allow them to compete west of Montreal, or again, whether high construction and operation costs in British Columbia should enforce a rate which would prevent her goods from moving far into the prairies. By an amendment to the Railway Act, the regulation of telephone, telegraph, and express rates was given to the Commission, but with narrower powers than were given to it in dealing with railways. By the Transport Act, the Board now has the power also to issue licences to persons or concerns entitled to engage in transport by air on the air routes declared to be under its jurisdiction by the Governor in Council. In the near future the power to issue licences to ships will also be exercised by the Board when the part of the Transport Act dealing with transport by water comes into effect by proclamation of the Governor in Council.*

---

* Revised by P. F. Baillargeon, Secretary, Board of Transport Commissioners for Canada.

The procedure of the Board is informal, as suits the nature of its work, for experience has shown that hearings in strict legal form lead the parties to the argument to take uncompromising attitudes. If possible, matters are settled by recommendations to the railway company or the shipper; thus, during 1937, 94·96 p.c. of the applications to the Board were settled without formal hearing. The Railway Committee had kept its station at Ottawa, giving only formal hearings, and so the grievances of those who could not afford to appear in person or pay counsel went unredressed. The itineraries of the Transport Commission are arranged so that evidence may be taken at the least expense to those giving it.

The Chief or Assistant Chief Commissioner, depending upon which one is presiding, gives final judgment on points of law when, in the opinion of the Commissioners, the question is one of law. On questions of fact the findings of the Board are final and are not qualified by previous judgments of any other court. Questions of law and jurisdiction are differentiated. In the first case, the Board may, if it wishes, allow an appeal to the Supreme Court; in the second, the applicant needs no permission to present his appeal.

The Railway Committee of the Privy Council, being a Committee of the Cabinet, was responsible to Parliament. When the powers of the Committee were made over to the Railway Commission (now the Board of Transport Commissioners) the responsibility was retained, but necessarily by a different means. There is now provision for an appeal from any decision to the Governor General in Council, who may also of his own motion rescind or vary the action of the Board, but the power to rescind or vary usually consists in referring to the Board for reconsideration. From its inception until Dec. 31, 1937, the Board gave formal hearing to 10,493 cases. Its decision was appealed in 124 cases, including 6 references for the opinion of the Supreme Court of Canada, 75 of these, including the above references, being to the Supreme Court of Canada and 49 to the Governor General in Council. Of the appeals, 13 of those carried to the Supreme Court were allowed and 3 of those to the Governor General in Council.

PART II.—RAILWAYS.

The treatment of rail transportation is divided into three sections dealing, respectively, with steam railways, electric railways, and express companies.

---

*This Part of the Act was proclaimed in force, with effect Jan. 15, 1939.

Section 1.—Steam Railways.*

The steam railway is still the most important transportation agency from the standpoint of investment and of traffic handled. Fortunately, the statistical field is more completely covered for this form of transportation than for any other, since there are fairly complete figures dealing with steam railway mileage, and equipment, finances, and traffic.

Historical Sketch.—Construction was begun on the first Canadian railway in 1835. This was a line only 16 miles long between Laprairie and St. Johns, Que., intended to expedite the journey between Montreal and New York. It was officially opened July 21, 1836, the motive power being the steam locomotive "Dorchester", built by Stephenson of Liverpool. About the same time, a line 6 miles long was built in Nova Scotia from Stellarton to a loading point on Pictou harbour to haul coal from the mines to vessels. On this line the motive power was at first provided by horses, but in the spring of 1839 the "Samson", a locomotive built in England, brought over in a sailing vessel and still preserved in Halifax, was put in operation. A railway from Montreal to Lachine was opened in 1847 and another line to St. Hyacinthe in 1848. In 1850, however, there were only 66 miles of railway in Canada.

Commencement of the Railway Era—The Grand Trunk.—The railway era in Canada may be said to have begun in 1851, when charters were granted providing for the construction of a main line of railway between the two Canadas. These charters were repealed when the Grand Trunk charter was granted in 1852. The result was the completion of the Grand Trunk railway between Montreal and Toronto in 1856, its extension westward to Sarnia in 1859, and eastward to Rivière du Loup in 1860. The Atlantic and St. Lawrence railway, to Portland, Maine, was leased in 1853 and in 1859, on the completion of the Victoria bridge across the St. Lawrence at Montreal, the Grand Trunk had a through route 800 miles long from Portland to Sarnia. Within the next thirty years many important railways of Ontario, including the Great Western, were acquired and the Grand Trunk lines were extended to Chicago.

Construction of the Intercolonial.—An intercolonial railway linking Nova Scotia and New Brunswick with Upper and Lower Canada had been proposed as early as the 1830's. In 1844 the Imperial Government made a survey for a military road, and in 1851 agreed to recommend to Parliament either a guarantee of interest or an advance of the sum required to build a railroad. Differences of opinion as to the route resulted in the project being dropped, but in 1853 Nova Scotia undertook to construct, by 1862, a trunk line from Halifax to the New Brunswick frontier, with branch lines to Pictou and Victoria Beach. In both Nova Scotia and New Brunswick, however, the scheme of an intercolonial railway broke down for lack of funds, and in 1867 there were only 374 miles of railway in the Maritimes. These, under the B.N.A. Act, passed to the Dominion Government. The latter undertook the completion of the railway, and in 1876 the line was opened to Rivière du Loup. Later on, by acquisition of, lease of, or running rights over, other lines, the Intercolonial was extended to Montreal.

---

* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an Annual Report on Steam Railways, as well as numerous other reports, for a full list of which the reader is referred to Chapter XXIX of this volume. Certain of the financial statistics of steam railways are compiled with the co-operation of officers of the Department of Transport.

The First Transcontinental Railway—The C.P.R.—As early as 1849 a pamphlet published by Major Carmichael-Smyth advocated the construction of a Canadian Pacific railway along a route approximating that later taken. In 1851 a Parliamentary Committee reported against the enterprise at that time. In 1871 the terms under which British Columbia entered Confederation bound the Dominion to commence the Pacific railway within two years and complete it within ten years. The building of the railway as a public work actually commenced in 1874, but was not very rapidly pushed forward. In 1880 the Government entered into a contract with the Canadian Pacific Railway syndicate, granting to the syndicate all portions of the line completed or under construction, a cash subsidy of $25,000,000, a land grant of 25,000,000 acres, free admission of materials for construction, and protection for 20 years against competing lines. The company on its side agreed to complete the railway to a fixed standard by May 1, 1891, and thereafter to maintain it efficiently. As a matter of fact, the last spike on the main line was driven on Nov. 7, 1885. Like the Grand Trunk, the Canadian Pacific Railway began to acquire branch lines as feeders in the settled parts of the country along its route.

The Second Transcontinental—The Grand Trunk Pacific.—About the end of the century the Grand Trunk, which already had a line as far west as Chicago, submitted to the Canadian Government a proposal whereby it might participate in the settlement and development of the West. Lines were to be leased from Chicago *via* Minneapolis to Winnipeg, and thence a new line, subsidized by the Government, would be built to the Pacific coast. The Government raised objections to so much of the line lying in the United States and a second proposal was made for a connecting line with larger subsidies from North Bay to Winnipeg. The Government submitted, in 1903, a counter proposal that the line, instead of terminating at North Bay, should be continued east to Moncton, New Brunswick, the eastern section from Moncton to Winnipeg to be constructed by the Government and leased to the Grand Trunk Pacific for a 50-year period, the railway paying no rent for the first seven years and 3 p.c. on the cost of the railway for the remaining 43 years. The western half of the railway from Winnipeg to Prince Rupert was to be built by the Grand Trunk Pacific, the Government guaranteeing interest on bonds to 75 p.c. of the cost of construction, not exceeding $13,000 per mile on the prairie section and $30,000 per mile on the mountain section. The Grand Trunk reluctantly accepted this proposition and construction of the National Transcontinental and Grand Trunk Pacific commenced.

The Third Transcontinental—The Canadian Northern Railway.—The third transcontinental railway, the Canadian Northern, was begun in 1896 with the completion by Mackenzie and Mann of the 125-mile line of the Lake Manitoba Railway and Canal Co., chartered in 1889. The charters of the Winnipeg and Hudson Bay; the Manitoba and Southeastern; the Ontario and Rainy River; and the Port Arthur, Duluth, and Western were next acquired. Assisted by the Manitoba Government, which desired to establish competition with the Canadian Pacific Railway, the Canadian Northern then secured the Manitoba lines of the Northern Pacific and in 1902 completed its line from Winnipeg to Port Arthur. During the following decade, the agricultural west was filling up very rapidly and, with the public of Canada under the influence of this boom, the Canadian Northern Railway was able to secure guarantees of bonds from the Dominion and Provincial Governments to enable it to extend its lines both westward to Vancouver and eastward to Montreal and so complete the great scheme of a transcontinental road.

Effect of the War on the Railways—The Drayton-Acworth Report.—With two new transcontinental main lines, besides branches, under construction, Canadian railway mileage was doubled between 1900 and 1915, increasing from 17,657 miles in the former year to 34,882 miles in the latter. The builders of the new lines, as well as the Canadian Government and people, had expected that immigration of capital and labour from Europe would rapidly settle the areas tributary to the new railroads and give them abundant and lucrative traffic, as had been the case with the C.P.R. Instead, the War came, and European labour and capital were conscripted for the struggle; immigration fell off and the anticipated traffic did not develop. On the other hand, the interest on the bonds had to be met, and in 1915 the Government felt it necessary to give assistance to the railways. In 1916, after having again made loans to the Grand Trunk Pacific Railway and the Canadian Northern Railway Co., a Royal Commission was appointed by Order in Council of July 13, 1916, to investigate: (1) the general problem of transportation; (2) the status of each of the three transcontinental systems; (3) the reorganization of any of the said systems, or their acquisition by the State; and (4) other matters considered by the Commission to be relevant to the general scope of the inquiry. The majority report of the Commission, signed by Sir Henry Drayton and Mr. Acworth, has formed the basis of the subsequent railway policy of Canada. Their recommendation was that the public should take control of the Canadian Northern, of the Grand Trunk Pacific, and the Grand Trunk proper, and that they should be administered on purely business principles by a board of trustees, such compensation as seemed proper to be decided by arbitration and given to the shareholders of the Canadian Northern and the Grand Trunk.

The process of the acquisition of these railways and the financial results of their operation down to the end of 1937 are described in the latter part of Subsection 2, pp. 640-649.

The Royal Commission of 1931.—During 1930 and 1931 both freight and passenger traffic declined until new low records were being established each succeeding month. Freight and passenger revenues consequently decreased at alarming rates and with increased capital expenditures and fixed charges, the financial condition of Canadian railways demanded readjustment. To study the situation and, if possible, to remedy it, the Government appointed a Royal Commission which, on Sept. 13, 1932, submitted its report, summarized at pp. 648-650 of the 1933 Year Book. During the following session of the Dominion Parliament legislation known as The Canadian National-Canadian Pacific Act (c. 33, 1933) was passed. A summary of this legislation was given at p. 655 of the 1936 Year Book.

Subsection 1.—Mileage and Equipment.

The mileage of steam railways in operation in Canada is given for 1835 to 1849 and for each year from 1850 to 1937 in Table **1**, showing the first great period of construction in the 1850's, when the mileage grew from 66 to 2,065; the lull in the 1860's, the second great period of construction in the 1870's and 1880's, the lull in the 1890's, the third great period of construction between 1900 and 1917 and the subsequent falling-off in the rate of increase.

1.—Record of Steam Railway Mileage, 1835-1937.

Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.	Year.	Miles in Operation.
	No.		No.		No.		No.		No.		No.
1835	[1]	1863	2,189	1879	6,858	1895	15,977	1911	25,400	1925	40,350
1836-46	22	1864	2,189	1880	7,194	1896	16,270	1912	26,840	1926	40,350
1847-49	54	1865	2,240	1881	7,331	1897	16,550	1913	29,304		
1850	66	1866	2,278	1882	8,697	1898	16,870	1914	30,795	1927	40,570
1851	159	1867	2,278	1883	9,577	1899	17,250	1915	34,882	1928	41,022
1852	205	1868	2,270	1884	10,273	1900	17,657	1916	36,985	1929	41,380
1853	506	1869	2,524	1885	10,773	1901	18,140	1917	38,369	1930	42,047
1854	764	1870	2,617	1886	11,793	1902	18,714	1918	38,252		
1855	877	1871	2,695	1887	12,184	1903	18,988	1919[2]	38,329	1931	42,280
1856	1,414	1872	2,899	1888	12,163	1904	19,431			1932	42,409
								1919[3]	38,495	1933	42,336
1857	1,444	1873	3,832	1889	12,628	1905	20,487	1920	38,805	1934	42,270
1858	1,863	1874	4,331	1890	13,151	1906	21,423	1921	39,191		
1859	1,994	1875	4,804	1891	13,838	1907	22,446				
1860	2,065	1876	5,218	1892	14,564	1908	22,966	1922	39,358	1935	42,916
1861	2,146	1877	5,782	1893	15,005	1909	24,104	1923	39,654	1936	42,552
1862	2,189	1878	6,226	1894	15,627	1910	24,731	1924	40,059	1937	42,727

[1] First railway construction begun but line not open for traffic until 1836. [2] As at June 30 for this and prior years. [3] As at Dec. 31 for this and later years.

In total railway mileage Canada now ranks fourth with 42,727 miles, the United States, Soviet Russia, and British India being the only countries with greater total mileages. In miles per capita only Australia has a greater average, the figure for Canada being one mile of line for each 263 persons (exclusive of 339 miles, chiefly main lines, of Canadian railways crossing over United States territory).

The operated mileage in the different provinces is given for recent years in Table 2. Construction was most active in Manitoba, Saskatchewan, and Alberta during the period covered while there has been a tendency for mileages to decline slightly in the other provinces, due to the abandonment of unprofitable lines.

2.—Operated Steam Railway Mileage, by Provinces, as at Dec. 31, 1929-37.

Type of Track and Province.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
Single Track—									
Prince Edward Island	276	286	286	286	286	286	286	286	286
Nova Scotia	1,420	1,418	1,418	1,410	1,410	1,406	1,397	1,397	1,397
New Brunswick	1,934	1,934	1,934	1,934	1,934	1,930	1,929	1,871	1,871
Quebec	4,891	4,891	4,926	4,879	4,863	4,858	4,858	4,777	4,814
Ontario	10,872	10,938	10,905	10,908	10,880	10,842	10,821	10,746	10,692
Manitoba	4,294	4,420	4,419	4,420	4,433	4,459	4,970	4,860	4,860
Saskatchewan	7,761	8,166	8,268	8,438	8,438	8,368	8,556	8,624	8,776
Alberta	5,516	5,581	5,630	5,652	5,654	5,696	5,760	5,687	5,751
British Columbia	4,024	4,021	4,097	4,085	4,041	4,028	3,942	3,907	3,883
Yukon	58	58	58	58	58	58	58	58	58
In United States	334	334	339	339	339	339	339	339	339
Totals, Single Track	41,380	42,047	42,280	42,409	42,336	42,270	42,916	42,552	42,727
Second track	2,658	2,688	2,688	2,682	2,531	2,525	2,507	2,500	2,500
Industrial track	1,607	1,623	1,606	1,578	1,534	1,495	1,453	1,401	1,390
Yard track and sidings	10,168	10,227	10,277	10,335	10,278	10,229	10,295	10,239	10,218
Grand Totals	**55,813**	**56,585**	**56,851**	**57,004**	**56,679**	**56,519**	**57,171**	**56,692**	**56,835**

Rolling-Stock.—Statistics of the rolling-stock of the steam railways of Canada are given for the latest seven years in Table 3. The figures may be supplemented by the statement that between 1920 and 1937 the average capacity of box cars increased from 34·779 tons to 41·058 tons, of flat cars from 33·459 to 41·433 tons, of coal cars from 43·404 tons to 52·524 tons, and of all freight cars from 35·141 tons to 41·755 tons. The average tractive power of the locomotives in use in 1920 was 31,112 lb. and in 1937, 38,870 lb.

3.—Rolling-Stock of Steam Railways, as at Dec. 31, 1931-37.

Type of Rolling-Stock.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.
Locomotives.							
Passenger	1,392	1,353	1,333	1,291	1,200	1,191	1,209
Freight	3,165	3,123	3,073	3,035	2,876	2,862	2,805
Switching	780	751	742	727	685	660	618
Electric	40	39	39	34	34	34	35
Totals	**5,377**	**5,266**	**5,187**	**5,087**	**4,795**	**4,747**	**4,667**
Passenger Cars.							
First class	1,975	1,933	1,924	1,907	1,745	1,754	1,850
Second class	364	355	355	350	295	276	256
Combination	490	469	463	461	362	372	370
Immigrant	644	643	634	628	566	419	374
Dining	264	264	261	260	257	256	251
Parlour	310	306	303	302	290	278	259
Sleeping[1]	1,235	1,198	1,175	1,163	1,138	1,085	1,037
Baggage, express, and postal	1,695	1,660	1,635	1,629	1,462	1,454	1,447
Motor cars	104	105	97	96	99	92	88
Other	530	526	507	490	455	457	463[2]
Totals[1]	**7,611**	**7,459**	**7,354**	**7,286**	**6,669**	**6,443**	**6,395**
Freight Cars.							
Box	152,841	150,979	146,207	141,768	128,816	124,448	125,421
Flat	17,266	16,370	15,837	15,124	13,501	12,991	12,548
Stock	9,281	9,048	8,522	8,744	7,467	7,219	7,077
Coal	23,091	22,722	22,472	18,115	17,566	17,463	18,066
Tank	512	480	476	468	425	432	421
Refrigerator	8,464	8,341	8,160	7,904	6,682	7,331	7,164
Other	3,310	3,056	2,988	2,929	2,303	2,124	2,076[3]
Totals	**214,765**	**210,996**	**204,662**	**195,052**	**176,760**	**172,008**	**172,773**

[1] Include Pullman Co. cars in Canadian service. [2] Includes 3 auto-railers. [3] Includes 1 auto-railer.

Subsection 2.—Finances of Steam Railways.

The tables in this subsection deal with the capital liability, capital invested, earnings, operating expenses, employees and their earnings, and governmental aid to steam railways. However, the presentation of the financial statistics of railways in Canada would not be complete without some detailed consideration of the finances of the Government-owned railways. This is given in the latter part of the subsection. Some further statistics of revenue are included in Table **21**, where they are shown in relation to traffic.

Capital Liability.—The capital liability of the steam railways of Canada is shown in Table **4** for the years 1901 to 1937. The great increase after 1922 is due to the inclusion of all Government loans to railways and investment in road and equipment of Government railways as part of the capital liability of the railways. The reduction in 1937, due to the Canadian National Capital Revision Act (c. 22, 1937), is explained on p. 644. Statistics of individual lines are given in Table **5**.

4.—Capital Liability of Steam Railways, 1901-37.

Note.—Corresponding figures for each year from 1876 to 1900, inclusive, are given on p. 649 of the 1927-28 Year Book.

Year.	Stocks.	Funded Debt.	Total.	Year.	Stocks.	Funded Debt.	Total.
	$	$	$		$	$	$
1901...	424,414,314	391,696,523	816,110,837	1920...	1,323,705,962	846,324,166	2,170,030.128
1902...	460,401,863	404,806,847	865.208,710	1921...	1,372,545,165	792,142,471	2,164,687,636
1903...	483,770,312	424,100,762	907,871,074	1922...	1,415,623,322	743,653,809	2,159,277,131
1904....	492,752,530	449,114,035	941,866,565				
1905...	526,353,951	465,543,967	991,897,918	1923[3]...	1,385,080,426	1,879,593,612	3,264,674,038
				1924...	1,401,263,285	2,012,602,328	3,413,865,613
1906...	561,655,395	504,226,234	1,065,881,629				
1907...	588,568,591	583,369,217	1,171,937,808	1925...	1,378,706,860	2,092,374,049	3,471.080,909
1908...	607,891,349	631,869,664	1,239,761,013	1926[4]...	1,361,758,426	2,144,999,621	3,506,758,047
1909...	647,534,647	660,946,769	1,308.481,416	1927[4]...	1,330,215,248	2,252,256,367	3,582.471,615
1910...	687,557,387	722,740,300	1,410,297,687	1928[4]...	1,357,017,703	2,306,554,996	3,663,572,699
1911...	749,207,687	779,481,514	1,528,689,201	1929[4]...	1,405,622,070	2,497,054,907	3,902,676,977
1912...	770.459.351	818,478,175	1,588,937,526				
1913....	918,573,740	613,256,952	1,531,830,692	1930[4]...	1,431,324,003	2,595,145,308	4,026,469,311
1914...	1,026,418,123	782,402,638	1,808,820,761	1931[4]...	1,438,050,759	2,793,971,329	4,232,022,088
1915...	1,024,085,983	851,724,905	1,875,810,888	1932[4]...	1,437,489,430	2,934,182,332	4,371,671,762
				1933[4]...	1,438,834,552	2,951,690,468	4,390,525,020
1916...	1,024,264,325	868,861,449	1,893,125,774	1934[4]...	1.437,334,152	2,966,505,594	4,403,839,746
1917....	1,089,114,875	896,005,116	1,985,119,991				
1918...	1,093,885,495	905,994,999	1,999,880,494	1935[4]...	1,433,849,530	3,026,414,779	4,460,264,309
1919[1]....	1,100,301,195	914,823,515	2,015,124,710	1936[4]...	1,425,193,791	3,062,411,719	4,487,605,510
1919[2]....	1,104,409,122	931,756,484	2,036,165,606	1937[4]...	1,839,619,361	1,534,450,789	3,374.070,150

[1] As at June 30 for this and prior years. [2] As at Dec. 31 for this and later years. [3] Includes all Government loans to railways and investments in road and equipment of Dominion and provincial railways in 1923 and later years. [4] Does not include Canadian railway capital owned by Canadian railways.

5.—Mileage, Capital Liability, Earnings, and Operating Expenses of Individual Steam Railways, calendar year 1937.

Railway.	Single-Track Mileage.	Capital Liability.	Gross Earnings from Operation.	Operating Expenses.
	miles.	$	$	$
Algoma Central Terminals, Ltd.[1]	[1]	3,095,628	[1]	[1]
Algoma Central and Hudson Bay	323·26	15,398,850	1,983,521	1,762,782
Alma and Jonquière	10·60	629,800	139,069	76,823
British Yukon	90·32	4,978,879	230,574	162,944
Canada and Gulf Terminal	38·10	1,740,000	89,405	69,215
Canada Southern (Lessee N.Y.C.)	381·00	44,365,000	15,557,571	8,298,902
Canadian National	21,973·85[2]	1,996,796,335[3]	165,082,489	153,711,913
Canadian Pacific	17,185·90[2]	1,200,913,421[3]	145,201,161	117,069,541
Central Vermont Railway, Inc	25·33	[1]	206,543	201,992
Cumberland Railway and Coal Co	31·29	1,352,508	188,740	127,753
Detroit River Terminal Co.[4]	[4]	4,050,884	[4]	[4]
Essex Terminal	21·31	976,000	256,036	172,155
Greater Winnipeg Water District	92·00	1,843,286	105,617	107,906
Hudson Bay	510·06	33,518,545	129,343	428,679
International Bridge and Terminal Co	1·06	300,000	97,570	41,414
Maine Central	5·10	102,388	11,348	12,094
Maritime Coal Railway and Power Co	12·20	699,743	77,938	49,127
Midland Railway of Manitoba	75·49	4,800,000	263,142	353,811
Morrissey, Fernie, and Michel	5·37	1,263,000	29,569	29,565
Napierville Junction	41·74	1,200,000	475,271	335,501
Nelson and Fort Sheppard	60·87	2,846,800	106,791	99,374
Nipissing Central[5]	59·74	4,187,510	483,849	431,207
Northern Alberta	927·62	30,095,000	2,504,001	1,742,434
Ottawa and New York	58·77	2,100,000	117,811	196,617
Pacific Great Eastern	347·80	90,527,948	631,370	568,139
Père Marquette (including L.E.D.R.)	319·02	8,122,025	4,718,148	2,680,255
Quebec Railway Light and Power Co	25·37	6,269,974	348,844	354,945
Roberval and Saguenay	29·04	3,330,000	540,747	174,711
St. Lawrence and Adirondack	60·69	2,153,599	393,229	541,140
Sydney and Louisburg	70·29	5,195,444	1,610,801	1,144,586
Témiscouata	113·00	3,856,336	190,192	183,985
Temiskaming and Northern Ontario[5]	514·69	40,857,935	5,338,041	3,315,120
Thousand Islands	4·51	60,000	36,874	31,080
Toronto, Hamilton, and Buffalo	111·03	10,567,000	1,980,221	1,358,720
Toronto Terminals	3·19	24,224,800	283,287	544,853
Van Buren Bridge Co	0·28	250,000	7,925	2,160
Vancouver, Victoria, and Eastern	86·85	23,500,000	587,295	393,801
Wabash (in Canada)	245·40	[1]	5,204,433	3,920,878
Totals (Including Trackage Rights Duplications)	**43,862·14**	**3,576,168,638**[6]	**355,208,766**	**300,696,122**
Canadian National (Can. and U.S.)	23,803·32	See above	198,396,609	180,788,858

[1] Not reported. [2] Includes 26·18 miles of joint track. Canadian lines only for Canadian National, but Canadian and U.S. lines for Canadian Pacific. [3] Including capital of leased lines. [4] Included with Canada Southern Rly. [5] Constructed and operated by Ontario Government Railway Commission. [6] Includes $202,098,488 Canadian railway capital owned by Canadian railways.

Capital Investment.—The capital structure of the Canadian National Railways, changed by the Capital Revision Act, 1937, was reduced by $262,770,972. Details of this Act are explained further on p. 644. The excess of capital liability as shown in Table 4 over the investments shown in Table 6 is accounted for by loans and advances from the Government to cover deficits of the Canadian National Railways and by the fact that some railway stock issues represented little actual investment in physical property. The investment account in recent years has been affected by write-offs for lines abandoned, transfers of property to other Government departments, etc.

Earnings and Expenses.—Operating expenses of Canadian railways rose during 1918, 1919, and 1920, much more than operating revenues, and the operating ratio, or ratio of expenses to revenues, increased from around 70 p.c. to above 90 p.c. and remained high thereafter. The United States Government took over the operation of the United States railways when that country entered the World War and increased the rates of pay of the railway employees. The Canadian railways were also obliged to make corresponding increases and these have been the chief factor in increased operating ratio. Declining revenues without corresponding reductions in expenses during the past five years have also maintained the high ratio. The gross earnings and operating expenses of individual railways for 1937 appear in Table 5.

6.—Capital Invested in Road and Equipment of Canadian Steam Railways, calendar years 1932-37.

Investment.	1932.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$	$
New Lines—						
Road	3,175,095	195,729	10,901	89,713	119,295	2,997,932
Equipment	Nil	12,322	Nil	Nil	Nil	Nil
General	371,262	620	86	Cr. 56	756	54,712
Totals	3,546,357	208,671	10,987	89,657	120,051	3,052,644
Additions and Betterments—						
Road	3,592,569	3,927,865	Cr. 5,354,703	2,656,051	6,263,284	5,382,065
Equipment	Cr. 4,090,763	Cr. 3,930,692	Cr. 3,494,711	Cr. 6,519,191	4,376,334	28,355,161
General	117,254	17,921	Cr. 2,811	5,641	Cr. 78,387	Cr. 6,158
Undistributed	Cr. 24,836	92,590	Cr. 163,872	53,862	1,608	3,436
Totals	Cr. 405,776	107,684	Cr. 9,016,097	Cr. 3,803,637	10,562,839	33,734,504
Undistributed[1]	977,301	Cr. 21,017,200	22,774,651	Cr. 67,902,913	Cr. 17,255,277	Cr. 265,358,397
Total Investments as at Dec. 31	**3,386,165,100**	**3,365,464,255**	**3,379,233,796**	**3,307,616,903**	**3,301,044,516**	**3,072,473,267**

[1] Details of this item are given in the Annual Report on Steam Railway Statistics issued by the Transportation and Public Utilities Branch of the Bureau of Statistics. The large credit in 1937 was principally due to the Canadian National Capital Revision Act, explained on p. 644.

7.—Earnings and Operating Expenses of Steam Railways per Mile of Line and per Train Mile, 1915-37.

Year.	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.	Per Mile of Line.			Per Revenue Train Mile.	
				Gross Earnings.	Operating Expenses.	Net Earnings.	Gross Earnings.	Operating Expenses.
	$	$	p.c.	$	$	$	$	$
1915	199,843,072	147,731,099	73·92	5,616	4,152	1,464	2·144	1·585
1916	261,888,654	180,542,259	68·94	6,943	4,823	2,120	2·358	1·623
1917	310,771,479	222,890,637	71·72	8,051	5,774	2,277	2·683	1·925
1918	330,220,150	273,955,436	82·96	8,581	7,119	1,462	3·006	2·494
1919[1]	382,976,901	341,866,509	89·27	9,947	8,879	1,068	3·683	3·292
1919[2]	408,598,361	376,789,093	92·26	10,568	9,745	823	3·817	3·520
1920	492,101,104	478,248,154	97·18	12,626	12.270	356	4·192	4·074
1921	458,008,891	422,581,205	92·25	11,636	10,735	901	4·376	4·038
1922	440,687,128	393,927,406	89·39	11,196	10,008	1,188	4·072	3·640
1923	478,338,047	413,862,818	86·52	12,098	10,434	1,664	4·180	3·616
1924	445,923,877	328,483,908	85·77	11,233	9,548	1,685	4·119	3·533
1925	455,297,288	372,149,656	81·70	11,383	9,222	2,161	4·132	3·378
1926	493,599,754	389,503,452	78·91	12,278	9,653	2,625	4·298	3·391
1927	499,064,207	407,646,280	81·68	12,350	10,047	2,303	4·221	3·448
1928	563,732,260	442,701,270	78·53	13,840	10,791	3,049	4·461	3·503
1929	534,106,045	433,077,113	81·08	13,068	10,596	2,472	4·492	3·643
1930	454,231,650	380,723,411	83·86	10,897	9,133	1,764	4·150	3·538
1931	358,549,382	321,025,588	89·53	8,502	7,612	890	3·747	3·435
1932	293,390,415	256,668,375	87·48	6,922	6,055	867	3·507	3·157
1933	270,278,276	233,133,108	86·26	6,365	5,490	875	3·528	3·153
1934	300,837,816	251,999,667	83·77	7,111	5,956	1,155	3·738	3·128
1935	310,107,155	263,942,899	85·11	7,250	6,170	1,080	3·751	3·193
1936	334,768,557	283,345,968	84·64	7,839	6,635	1,204	4·012	3·395
1937	355,103,271	300,652,548	84·67	8,316	7,041	1,275	4·087	3·460

[1] Years ended June 30 for this and previous years. [2] Years ended Dec. 31 for this and later years.

8.—Distribution of Operating Expenses of Steam Railways, calendar years 1934-37.

Item.	1934.		1935.		1936.		1937.	
	$	p.c.	$	p.c.	$	p.c.	$	p.c.
Way and structures	53,502,807	21·23	55,250,291	20·93	60,378,275	21·31	58,309,150	19·39
Equipment	54,004,990	21·43	57,424,660	21·76	63,755,028	22·50	73,166,522	24·34
Traffic expenses	11,517,145	4·57	11,807,234	4·47	12,059,438	4·26	12,287,021	4·09
Transportation	118,639,517	47·08	124,359,790	47·12	130,780,123	46·16	139,108,818	46·27
General and misc. expenses	14,335,208	5·69	15,100,924	5·72	16,373,104	5·77	17,781,037	5·91
Totals	**251,999,667**	**100·00**	**263,942,899**	**100·00**	**283,345,968**	**100·00**	**300,652,548**	**100·00**

Railway Wages and Salaries.—The data in Table 9 show the numbers of employees and the amounts of salaries and wages as reported by the railways for 1926 to 1937, inclusive. The Canadian National Railways brought into their railway accounts in 1928 the commercial telegraph employees, and these have been added for 1926 and 1927 in this table to make the data comparable. Because of inability of the railways to supply strictly comparable data for previous years, the numbers of employees and wages have been omitted for such, but index numbers have been computed for 1912-37 on as nearly comparable bases as possible, using 1926 data as equal to 100. The number of employees fluctuates with the volume of traffic, but not to the same extent. Salaries and wages are affected by the number of employees, rates of pay, and by the time worked. The rapid increase in the average wage in 1918 and 1919 was due to large increases in rates of pay corresponding to the "Macadoo Award" in the United States. Also the fluctuations in 1932-37 were due to reductions and restorations in basic rates of pay.

9.—Steam Railway Employees, Totals and Averages of Salaries and Wages, and Ratio of Salaries and Wages to Operating Revenues and Expenses, 1912-37.

Year.	Employees.		Salaries and Wages.		Average of Salaries and Wages.		Ratio of Salaries and Wages to—	
	Number.	Adjusted Index Number	Amount.	Adjusted Index Number.	Amount.	Adjusted Index Number.	Gross Earnings.	Operating Expenses.[1]
			$		$		p.c.	p.c.
1912	[3]	92·2	[3]	38·2	604	41·7	43·0	62·5
1913		105·7		46·9	648	44·8	45·1	63·6
1914		94·1		45·3	702	48·5	46·0	62·5
1915		81·6		38·6	690	47·7	47·7	64·5
1916		92·0		44·0	699	48·3	41·5	60·2
1917		86·4		52·5	887	61·3	41·7	58·2
1918		84·9		61·7	1,061	73·3	46·1	55·6
1919[2]		93·9		84·6	1,316	90·8	54·6	61·1
1919[4]		102·7		94·5	1,343	92·7	57·1	61·9
1920		109·5		117·7	1,569	108·4	59·0	60·7
1921		99·1		100·3	1,478	102·1	54·1	58·6
1922		98·0		94·5	1,408	97·2	52·9	59·2
1923		103·0		100·9	1,430	98·8	52·8	61·1
1924		98·1		95·2	1,416	97·8	53·5	62·5
1925		95·8		94·3	1,438	99·3	52·0	63·6
1926	179,800	100·0	260,350,390	100·0	1,448	100·0	45·7	58·0
1927	182,143	101·3	273,932,396	105·2	1,504	103·9	48·1	58·9
1928	187,710	104·4	287,775,316	110·5	1,533	105·9	47·0	59·8
1929	187,846	104·5	290,732,500	111·7	1,548	106·9	48·9	60·2
1930	174,485	97·0	268,347,374	103·1	1,538	106·2	55·4	66·1
1931	154,569	86·0	229,499,505	88·2	1,485	102·6	58·5	65·4
1932	132,678	73·8	181,113,588	69·6	1,365	94·3	56·4	64·5
1933	121,923	67·8	158,326,445	60·8	1,299	89·7	53·9	62·5
1934	127,326	70·8	163,336,635	62·7	1,283	88·6	54·3	64·8
1935	127,526	70·9	172,956,218	66·4	1,356	93·6	51·2	60·1
1936	132,781	73·9	182,638,365	70·2	1,375	95·0	49·9	59·0
1937	133,467	74·2	193,355,584	74·3	1,449	100·1	51·4	60·7

[1] Ratio of salaries and wages chargeable partly to capital prior to 1926 but to operating expenses only for 1926 and subsequent years. [2] Years ended June 30 for this and previous years. [3] Owing to the inability of the railways to supply strictly comparable data for the years prior to 1926, statistics of employees and wages, which are given on p. 664 of the 1936 Year Book, have been omitted here; the adjusted index numbers express the relation with later years as closely as it can be approximated. [4] Years ended Dec. 31 for this and later years.

Government Aid to Railways.—In order that the private railways of Canada might be constructed in advance of settlement, as colonization roads, or through thinly settled districts where little traffic was available, it was necessary for Dominion and Provincial Governments and even the municipalities to extend some form of assistance. The form of aid was generally a bonus of a fixed amount per mile of railway constructed and, in the early days, grants of land other than for right-of-way were also made. Tables **10** and **11** show the areas of the land granted as subsidies and for right-of-way, station grounds and townsite purposes to steam railway companies by the Dominion and Provincial Governments; the former gives the data by type of grant and the latter by railway companies to which the grants were made.

As the country developed, the objections to the land-grant method became more apparent, and aid was more frequently given in the form of a cash subsidy per mile of line, a loan, or a subscription to the shares of the railway, as shown analytically in Table **12**. Guarantees of debenture issues were given in a later period and since the formation of the Canadian National Railways all debenture issues of that system, except those for rolling-stock, have been guaranteed by the Dominion Government.

10.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1937, by Type of Grant.

Government.	Bonus Grants.	Grants for Right-of-Way, Station Grounds, and Townsite Purposes.	Total.
	acres.	acres.	acres.
Dominion	31,783,655	97,988	31,881,643
Nova Scotia	160,000	Nil	160,000
New Brunswick	1,788,392	"	1,788,392
Quebec	2,085,710	"	2,085,710
Ontario	3,241,207	229,502	3,470,709
Manitoba	Nil	2,572	2,572
Saskatchewan	"	4,928	4,928
Alberta	"	328	328
British Columbia	8,233,410	12,258	8,245,668[1]
Totals	**47,292,374**	**347,576**	**47,639,950**

[1] Includes 4,065,076 acres repurchased from B.C. Southern and Columbia and Western Railways.

11.—Areas of Land Granted to Steam Railways by the Dominion and Provincial Governments to Dec. 31, 1937, by Railways.

Railways and Item.	Granted by—		Total.
	Dominion.	Provinces.	
	acres.	acres.	acres.
Canadian National Railways	5,763,741	1,841,061	7,604,802
Canadian Pacific and branch lines	19,861,357	6,824	19,868,181
Acquired lines	3,320,446	8,182,588	11,503,034
Leased lines—lease based on—			
Interest on bonds or dividends on stock	2,927,185	2,657,879	5,585,064
Gross earnings	55	Nil	55
Totals, Canadian Pacific System	*26,109,043*	*10,847,291*	*36,956,334*
Other railways	8,859	3,069,871	3,078,730
Totals, All Railways	**31,881,643**	**15,758,223**	**47,639,866**

12.—Cash Subsidies Granted to Railways to Dec. 31, 1937, by Railways.

Railways and Item.	Granted by—			Total.
	Dominion.	Provinces.	Municipalities.	
	$	$	$	$
Canadian National Railways	64,403,853[1]	16,677,208	7,393,867	88,474,928
Canadian Pacific Railway	25,000,000	937,657	464,761	26,402,418
Branch lines	5,089,509	Nil	Nil	5,089,509
Lines turned over to C.P.—cost to Government	36,234,310	"	"	36,234,310
C.P. Extensions—cost to Government	1,500,000	"	"	1,500,000
Paid to Quebec province for North Shore.	2,394,000	"	"	2,394,000
Loan repaid by return of land grants (6,793,014 acres)	10,189,521	"	"	10,189,521
Acquired lines	11,091,608	9,054,945	2,527,150	22,673,703
Leased lines—lease based on—				
Interest on bonds or dividends on stock	7,488,367	4,224,388	1,545,246	13,258,001
Fixed rental	20,224	24,102	Nil	44,326
Gross earnings	853,445	346,500	73,000	1,272,945
Totals, Canadian Pacific Railway System	*99,860,984*	*14,587,592*	*4,610,157*	*119,058,733*
Other railways	7,935,385	2,126,869	1,297,668	11,359,922
Totals, All Railways	**172,200,222**	**33,391,669**	**13,301,692**	**218,893,583**

[1] Includes $15,142,633 loan to Grand Trunk.

13.—Railway Bonds Guaranteed by Dominion and Provincial Governments, as at Dec. 31, 1937.

Government.	Canadian National.	Canadian Pacific.	Other Railways.	Total.
	$	$	$	$
Provincial Governments—				
New Brunswick	2,727,977	620,000	297,000	3,644,977
Ontario	6,725,485	Nil	Nil	6,725,485
Manitoba	3,000,000	"	"	3,000,000
Saskatchewan	17,904,062	"	"	17,904,062
Alberta	18,394,428	"	"	18,394,428
British Columbia	25,026,001	"	20,160,000	45,186,001
Totals, Provincial Governments	73,777,953	620,000	20,457,000	94,854,953
Dominion Government	754,490,048[1]	Nil	Nil	754,490,048[1]
Grand Totals	**828,268,001**[1]	**620,000**	**20,457,000**	**849,345,001**[1]

[1] Does not include $216,207,142 perpetual debenture stock and guaranteed stock of the former Grand Trunk Railway, now part of the Canadian National System, on which interest and dividends are guaranteed by the Dominion Government.

FINANCIAL STATISTICS OF GOVERNMENT-OWNED RAILWAYS.

Canadian Government Railways.—The Intercolonial Railway, built as a condition of Confederation and completed in 1876, and the Prince Edward Island Railway, opened in April, 1875, have, since their construction, been owned and operated by the Dominion Government. In 1903 the Dominion Government undertook the construction of the National Transcontinental railway line from Moncton, N.B., to Winnipeg, to be leased to the Grand Trunk Pacific Railway Co. for a period of 50 years. However, during the Great War the company was unable to take over the operation of the road when completed in 1915. The Government itself undertook its operation and was also obliged to lease the Lake Superior branch of the Grand Trunk Pacific Railway, which was isolated from the main line. A number of eastern branch lines have been acquired in recent years. The Hudson Bay Railway is a direct liability of the Dominion Government and is being operated by the Canadian National for the Government from Apr. 1, 1935, but is not included in the data for Canadian National Railways. To Mar. 31, 1938, the total cost of this railway was $34,368,231,* exclusive of the expenditure of $6,274,188 on the terminal at Nelson. The terminals at Churchill were transferred in 1937 to the National Harbours Board. The investment to Dec. 31, 1937, was $13,308,376* and the operating deficit for 1937 was $140,890.

Table 14 shows the principal items of the investment account of the Department of Transport pertaining to railways. The major portion of these investments were construction costs of the Intercolonial system, the National Transcontinental railway, and the Hudson Bay railway, and the purchase price of small railways in the eastern provinces.

The terminals at Churchill consisting of a grain elevator, warehouse, and docks were transferred to the National Harbours Board and the investment removed from the railway account. Loans and advances to the Canadian National Railways for payment of operating deficits were charged to the Consolidated Revenue Account of the Dominion and also cleared from the railway account and other adjustments were made under the Canadian National Railways Capital Revision Act, 1937, more fully explained on p. 644.

The Canadian Pacific item and 'Other railways' item include grants to railways for construction included in the Public Accounts, Appendix No. 28 C.

In addition to these expenditures the Dominion Government has made loans to the Canadian National and Canadian Pacific railway companies for capital purposes, for special works programs, and for equipment leased to the railways; the amounts outstanding on Mar. 31, 1938, were:—

Canadian National Railway Co.	$21,441,135·50
Canadian Pacific Railway Co.	7,343,760·00
Total	28,784,895·50

---

* These figures include deficits from operations during construction.

14.—Railway Investment Account of the Dominion Government to Mar. 31, 1938.

Account.	Expenditures, 1937-38.	Total to Mar. 31, 1938.
	$	$
Canadian Government Railways.		
ROADS ENTRUSTED TO CANADIAN NATIONAL RAILWAYS—		
Intercolonial system	409,960	132,693,582
Prince Edward Island	Cr. 2,179,322	14,320,955
National Transcontinental	Cr. 4,297,842	164,052,819
Other railways	5,391,554	77,136,966
TOTALS	Cr. 675,650	388,204,322
ROADS NOT ENTRUSTED TO CANADIAN NATIONAL RAILWAYS—		
Hudson Bay Railway	520,332	33,158,655
Nelson terminal	Cr. 30	6,240,171
Churchill terminals	Cr. [1]	13,263,759
TOTALS	Cr. 12,743,457	39,398,826
Totals, Canadian Government Railways	**Cr. 13,419,107**	**427,603,148**

For footnotes, see end of table, p. 642.

14.—Railway Investment Account of the Dominion Government to Mar. 31, 1938— concluded.

Account.	Expenditures, 1937-38.	Total to Mar. 31, 1938.
Other Items.	$	$
Canadian National Railways Securities Trust stock	269,325,706[2]	269,325,706
Canadian National Railways stock	18,000,000[3]	18,000,000
Loans to Canadian National lines to meet deficits	Cr.	655,527,456[4]
Loans to Canadian National system for purchase of equipment	9,432,997	9,432,997
Advances to Grand Trunk Railway	Cr. 25,607,394	121,740
Governor-General's cars	Nil	71,539
Canadian Pacific Railway grant and value of railway transferred	"	62,791,435
Other railways	"	1,369,007
Totals, Other Items	**Cr. 384,376,147**	**361,112,424**
Grand Totals	**Cr. 397,795,254**	**788,715,571**

[1] Transferred to National Harbours Board in 1938. [2] Advances used for capital purposes, out of total loans of $655,527,456. [3] New stock held by Government controlling company, which in turn holds all subsidiary companies 'stock. [4] Under the Capital Revision Act this liability of the C.N.R. was discharged and replaced by no-par value stocks, set up at $269,325,706 and $18,000,000.

The Consolidation and Organization of the Canadian National System.*—In pursuance of an Act of 1917 (7-8 Geo. V, c. 24), the Government acquired the capital stock of the Canadian Northern Railways with a mileage of 9,566·5. The insolvency of the Grand Trunk Pacific led to the appointment of the Minister of Railways as receiver on Mar. 9, 1919, and in October, 1920, the road was transferred to the Canadian National Railways. The Grand Trunk Railway was acquired under c. 13 of the Statutes of the second session of 1919, providing for arbitration of the consideration to be given to its shareholders. This arbitration finally disposed of, steps were taken to consolidate the various railways under government operation and control. In October, 1922, the Grand Trunk Board and the Canadian Northern Board gave place to a single Canadian National Board, to which the former Canadian Government Railways were turned over for management and operation. The unification of the Grand Trunk and Canadian National Railways was provided for by Order in Council of Jan. 30, 1923, which also brought into effect the Act to incorporate the Canadian National Railway Co. and respecting Canadian National Railways (c. 13, 1919).

Operating Finances of the Canadian National Railways.†—In Table **15** "Canadian Lines" include those of the Canadian Northern system, the Grand Trunk Railway of Canada, the Grand Trunk Pacific, and the Canadian Government Railways. The "United States Lines" include those lines known as the New England line, the Grand Trunk Western, the Duluth, Winnipeg and Pacific, and, from Feb. 1, 1930, the Central Vermont. The Hudson Bay Railway was returned to the Government while under construction, and appropriations, etc., for this were not included with the 1926 and later data.

Gross revenues, operating expenses, and net revenues shown in Table **15** include only those from steam railway and commercial telegraph operations, but the deficits are for the entire system, including the operating results of the Niagara, St. Catharines and Toronto Railway (electric) and other railways operated separately, hotels, commercial telegraphs, coastal steamships and all other outside operations.

---

*For further details of the acquisition of the Canadian Northern, Grand Trunk Pacific, and Grand Trunk Railways by the Dominion Government, see pp. 602-603 of the 1926 Year Book.

†For detailed statistics of the operation and finances of the Canadian National Railways during 1937, see Steam Railway Statistics, 1937, and Canadian National Railways, 1923-37, published by the Dominion Bureau of Statistics, also the Annual Report of the Canadian National Railways.

Under the Canadian National Railways Capital Revision Act (c. 22, 1937), interest on Dominion Government loans, amounting to $530,832,598, and Government claims for interest, amounting to $43,949,039, were cancelled as liabilities of the railway and these have been eliminated from Table **15**.

15.—Gross Revenues, Operating Expenses, Net Revenues, Fixed Charges, and Deficits of the Canadian National Railways,[1] calendar years 1923-37.

Year.	Gross Operating Revenues.	Operating Expenses.	Net Operating Revenues.			Income Available for Fixed Charges.
			Canadian Lines.	United States Lines.	Total.	
	$	$	$	$	$	$
1923	256,961,590	235,838,046	12,543,443	8,580,101	21,123,544	15,248,264
1924	239,596,670	221,622,049	12,494,459	5,480,162	17,974,621	16,919,824
1925	249,411,884	216,290,434	24,702,755	8,418,695	33,121,450	32,343,023
1926	270,982,223	223,561,262	36,312,349	11,108,612	47,420,961	43,505,500
1927	274,879,118	233,305,267	30,959,378	10,614,473	41,573,851	38,389,220
1928	304,591,268	249,731,696	42,638,750	12,220,822	54,859,572	48,289,321
1929	290,496,980	248,632,275	30,998,589	10,866,116	41,864,705	36,604,368
1930	250,368,998	228,288,023	16,944,523	5,136,452	22,080,975	19,971,106
1931	200,505,162	199,312,995	2,313	1,189,854	1,192,167	Dr. 1,738,089
1932	161,103,594	155,208,161	5,647,334	248,099	5,895,433	Dr. 1,316,739
1933	148,519,742	142,812,559	4,128,998	1,578,185	5,707,183	Dr. 1,111,028
1934	164,902,502	151,936,079	10,527,798	2,438,625	12,966,423	8,715,785
1935	173,184,502	158,926,249	9,502,437	4,755,816	14,258,253	8,014,635
1936	186,610,489	171,477,690	9,096,990	6,035,809	15,132,799	8,975,091
1937	198,396,609	180,788,858	11,370,576	6,237,175	17,607,751	11,241,763

Year.	Fixed Charges.			Net Income Deficit.[2, 3]	Profit and Loss Net Debt.[3]	Capital Losses, etc. Not Required in Cash.[3]	Cash Deficit.[3]
	Rent for Leased Road and Equipment.	Discount on Funded Debt, Interest, etc.	Total Fixed Charges.				
	$	$	$	$	$	$	$
1923	1,387,906	35,400,088	36,787,994	21,539,730	2,936,648	1,476,185	23,000,193
1924	1,452,709	39,056,491	40,509,200	23,589,376	Cr. 385,872	3,029,278	20,174,226
1925	1,276,120	41,061,285	42,337,405	9,994,382	206,505	395,711	9,805,176
1926	1,284,639	39,831,853	41,116,492	Cr. 2,389,008	Cr. 6,502,004	−7,318,391	Cr. 1,572,621
1927	1,274,017	41,315,881	42,589,898	4,200,678	820,988	602,365	4,419,301
1928	1,299,813	44,350,608	45,650,421	Cr. 2,638,900	3,446,392	4,271,244	Cr. 3,463,752
1929	1,213,641	48,799,433	50,013,074	13,408,706	511,067	1,658,142	12,261,631
1930	1,292,014	54,264,987	55,557,001	35,585,895	5,453,922	5,362,720	35,677,097
1931	1,328,622	57,803,084	59,131,706	60,869,795	5,762,261	5,663,618	60,968,438
1932	1,350,197	58,339,983	59,690,180	61,006,919	4,802,615	4,967,807	60,841,727
1933	1,351,788	57,554,897	58,906,685	60,017,713	1,600,102	2,662,427	58,955,388
1934	1,372,037	56,850,443	58,222,480	49,506,695	4,161,080	5,259,874	48,407,901
1935	1,372,713	55,520,104	56,892,817	48,878,182	30,453,831	31,910,548	47,421,465
1936	1,372,229	50,800,208	52,172,437	43,197,346	12,684,818	12,578,770	43,303,394
1937	1,505,689	51,764,728	53,270,417	42,028,654	1,028,946	711,732[5]	42,345,868[6]

---

[1] Includes the Central Vermont Railway, Inc., from Feb. 1, 1930. [2] Net income deficit includes appropriations for insurance fund of $9,840,672 and excludes interest on Government loans eliminated by Capital Revision Act, 1937. [3] The profit and loss deficits are for the entire system including separately operated electric railways, hotels, steamships, etc., and, with the interest on Government loans, were eliminated Dec. 31, 1936, by the Capital Revision Act, 1937, as follows:—

Item.	At Dec. 31, 1922.	Fourteen Years, 1923-36.	Adjustments: Dom. Govt. Rly. Accts. and Dom. Govt. Interest.	In Dispute.	Total.	Dom. Govt. Contributions for Deficits, 1927-36.	Eliminated by Capital Revision Act, 1937.
	$	$	$	$	$	$	$
Deficits	165,623,098	492,719,862	−103,247	Nil	658,239,713	284,416,593	373,823,120
Interest	69,328,803	467,943,248	−6,439,453	43,949,039	574,781,637	Nil	574,781,637

[5] Charged to "Proprietor's Equity". [6] Contributed by Dominion Government.

Capital Revision of the Canadian National Railways.—The Canadian National Railways Capital Revision Act, c. 22 of the Statutes of 1937, dealt with certain Government liabilities of the system. It created the Canadian National Railways Securities Trust as a medium for maintaining in perpetuity the Government's claims against the system for loans made, amounting to $643,860,558, and accrued unpaid interest of $574,781,637. This total of $1,218,642,195 included a claim of $43,949,039 for interest on loans not included in the Canadian National accounts. No-par value capital stock of the Securities Trust was issued to the Government in exchange for these claims at an initial stated value equal to the amount of loans used for capital purposes, namely, $270,037,438. Capital stocks held by the Government were cancelled to the extent of $247,628,339, and claim for an old loan of the Province of Canada, amounting to $15,142,633 was abandoned. All stock ownership of the various railways was placed under the control of the Canadian National Railways, the Government in turn receiving stock of the latter company. Table **16** gives the changes effected by the Act in the railway accounts.

A great deal of confusion has been evident when the liability accounts of the National Railways and those of the Dominion were brought together, and to avoid duplication in future, the Act provided that liabilities of the National Railways to the Government (excepting temporary financing) be shown under the descriptive heading of "Dominion Government Proprietor's Equity"; this is because such liabilities are all included in the net debt of Canada.

This new account will reflect annually all capital losses due to abandonments and the like that are not included in the annual deficit of the Railway as submitted to Parliament.

Deficits will be paid from the Consolidated Fund of Canada, in conformity with the provisions of the Canadian National-Canadian Pacific Act, 1936, which provides that deficits shall not be funded. Any temporary assistance by the Government on capital account will be repaid through the proceeds of securities sold by the Canadian National Railways.

Finally, the Act provides that an appendix shall be included in the Public Accounts of Canada to show the historical record of Government assistance to Railways, and a note to this effect will appear on the balance sheet of the Canadian National Railways in connection with the "Proprietor's Equity".

16.—Condensed Consolidated Balance Sheet at Dec. 31, 1936, showing Adjustments as of Jan. 1, 1937, as Authorized by the Canadian National Railways Capital Revision Act, 1937.

Item.	As Published Dec. 31, 1936.	Adjustments Authorized by Act.	As Revised Jan. 1, 1937.
	$	$	$
Assets.			
Investments—			
Investment in road and equipment	2,095,114,004	−262,770,972	1,832,343,032
Improvements on leased railway property	4,248,964	Nil	4,248,964
Miscellaneous physical property	59,814,644	"	59,814,644
Totals, Property Investment Account	2,159,177,612	−262,770,972	1,896,406,640
Other investments	38,375,620	Nil	38,375,620
Totals, Investments	2,197,553,232	−262,770,972	1,934,782,260
Current assets	67,365,730	Nil	67,365,730
Deferred assets	18,633,882	"	18,633,882
Unadjusted debits	16,816,125	"	16,816,125
Totals, Assets	**2,300,368,969**	**−262,770,972**	**2,037,597,997**

16.—Condensed Consolidated Balance Sheet at Dec. 31, 1936, showing Adjustments as of Jan. 1, 1937, as Authorized by the Canadian National Railways Capital Revision Act, 1937—concluded.

Item.	As Published Dec. 31, 1936.	Adjustments Authorized by Act.	As Revised Jan. 1, 1937.
Liabilities.	$	$	$
Capital stocks owned by Dominion Government	265,628,339	−265,628.339	Nil
Capital stocks owned by public	4,584,100	Nil	4,584,100
Government grants by Province of Canada	15,142,633	−15,142.633	Nil
Other grants	3,013,749	Nil	3,013,749
Funded debt—public	1,184,612,249	"	1,184,612,249
Loans for Dominion of Canada and interest thereon	1,251,916,623 [1]	−1,174,693,156 [1,2]	77,223,467
Dominion of Canada expenditures for Canadian Government Railways—			
Road and equipment	388.290,263	−388,290.263	Nil
Working capital	16,771,981	Nil	16,771,981
Current liabilities	35,351,859	"	35,351,859
Deferred liabilities	3,331,771	"	3,331,771
Unadjusted credits and reserves	36,381,120	"	36,381,120
Profit and loss balance—deficit	−904,655,718	904,655,718	Nil
New Account Authorized—			
Dominion Government Proprietor's Equity (represented by)—			
1,000,000 shares of no-par value capital stock of the Canadian National Railway Company issued in exchange for the residual value of Canadian Northern Capital Stock $ 18,000,000			
5,000,000 shares of no-par value capital stock issued by Securities Trust to the Government in consideration for the securities, advances, claims for unpaid interest and collateral security held by Government $ 270,037,438			
Dominion Government capital expenditures for Canadian Government Railways $ 388,290,263	–	676,327,701	676,327,701
Totals, Liabilities	**2,300,368,969** [1]	**−262,770,972** [1]	**2,037,597,997**

---

[1] Does not include Dominion Government claims for interest amounting to $43,949,039. [2] Made up of: loans for capital, $270,037,438; loans for deficits, $373,823,120; and accrued interest, $530,832,598.

Capital Structure and Debt of Canadian National Railways.—The Capital Revision Act, eliminated the Profit and Loss balance as at Jan. 1, 1937, and Profit and Loss balances for 1937 and future years will also be eliminated by charging to "Dominion Government Proprietor's Equity" the losses due to abandonment of lines and other such items which do not involve the payment of cash at the time the items are written down, and by the Government contributing cash for the cash deficits. These cash deficits are shown in the last column of Table **15** and for the years 1923-36 have been met by loans by the Government, by direct payment from July 1, 1927, and by reduction of working capital.

Table **17** shows for each year 1922 to 1937: (1) shareholders' capital; (2) funded debt held by public; (3) Government loans and advances; and (4) appropriations for Canadian Government Railways. The share capital consisted of $165,627,739 stock of the Grand Trunk Railway held by the Dominion Government and $100,000,600 of the Canadian Northern Railway stock also held by the Dominion Government. There was also outstanding on Dec. 31, 1922, $4,591,975 stock of constituent lines held by the public, of which $8,175 has been retired. The table shows the adjustments of the capital liabilities of the system made effective Jan. 1, 1937, under the Capital Revision Act.

17.—Capital Structure and Debt of the Canadian National Railways, as at Dec. 31, 1922-37.

Year.	Shareholders' Capital.			Funded Debt Held by Public.			Government Loans and Advances.		Appropriations for Canadian Government Railways.	Grand Total.
	Capital Stock Held by Government.	Dominion Government—Proprietor's Equity.	Capital Stock Held by Public.	Guaranteed by—		Unguaranteed.	Non-active Assets in Public Accounts.	Active Assets in Public Accounts.		
				Dominion Government.	Provincial Governments.					
	$	$	$	$	$	$	$	$	$	$
[2]	265,628,339	-	4,591,975	331,309,904	93,412,807	385,198,150	115,607,457	Nil	404,272,030[3]	1,329,800,348
Dec. 31, 1922	265,628,339	-	4,591,975	447,872,904	93,574,380	263,055,860	506,945,969	"	442,062,571	2,023,731,998
" 31, 1923	265,628,339	-	4,591,975	470,372,904	93,574,380	259,151,772	567,870,480	"	447,643,526	2,108,833,376
" 31, 1924	265,628,339	-	4,601,500	558,872,904	93,574,380	261,465,799	574,657,394	-14,259,436	451,712,485	2,196,253,365
" 31, 1925	265,628,339	-	4,600,075	581,372,904	93,574,380	256,382,019	572,685,535	Nil	453,935,303	2,228,178,555
" 31, 1926	265,628,339	-	4,596,410[4]	579,872,891	93,574,380	252,032,973[4]	594,200,367	100,000	437,412,033[5]	2,227,417,393
" 31, 1927	265,628,339	-	4,594,410	657,181,330	93,574,380	230,626,027	595,458,349	80,000	436,416,387	2,283,559,222
" 31, 1928	265,628,339	-	4,617,610	681,000,655	93,574,380	203,313,998	601,406,082	13,506,139	417,279,953	2,280,327,156
" 31, 1929	265,628,339	-	4,594,910	807,048,434	94,654,505	220,856,554	601,406,082	32,641,600[1]	417,150,141	2,443,980,565
" 31, 1930	265,628,339	-	4,592,785	854,431,995	74,912,466	239,221,402	604,406,239	46,660,542[1]	403,443,935	2,493,297,703
" 31, 1931	265,628,339	-	4,592,625	970,562,289	74,912,466	230,982,452	604,406,239	35,008,251	405,209,240	2,591,301,901
" 31, 1932	265,628,339	-	4,585,225	965,831,382	74,912,466	223,773,319	645,527,456	50,195,751	405,170,073	2,635,624,011
" 31, 1933	265,628,339	-	4,585,225	962,992,576	74,912,466	217,397,113	645,527,456	16,305,439[1]	404,378,682	2,591,727,296
" 31, 1934	265,628,339	-	4,584,825	963,906,119	74,912,466	207,511,854	645,527,456	27,053,487	404,279,909	2,593,404,455
" 31, 1935	265,628,339	-	4,584,225	889,741,774	74,912,466	190,124,761	645,527,456	109,073,454	405,062,275	2,584,654,750
" 31, 1936	265,628,339	-	4,584,100	937,620,214	73,777,953	173,214,082	643,860,558	77,223,467	405,062,244	2,580,970,957
Jan. 1, 1937	[6]	676,327,701	4,584,100	937,620,214	73,777,953	173,214,082	-	77,223,467	16,771,981[6]	1,959,519,498
Dec. 31, 1937	[6]	675,530,028	4,583,800	970,697,190	73,777,953	177,522,256	-	62,480,567	16,771,981[6]	1,981,363,775
Increases or decreases, 1922-37	-265,628,339	675,530,028	-8,175	522,824,286	-19,796,427	-85,533,604	-506,945,969	62,480,567	-425,290,590	- 42,368,223
Adjustments under the Capital Revision Act of 1937	-265,628,339	676,327,701	Nil	Nil	Nil	Nil	-643,860,558	Nil	-388,290,263[7]	-621,451,459
Transfers of Canadian Government railway property to other Government departments	Nil	- 85,941	"	"	"	"	Nil	"	-42,760,459	-42,846,400
Capital losses since Jan. 1, 1937	"	-711,732	"	"	"	"	"	"	Nil	-711,732
Capital receipts, 1923-37 (see Table 18)	"	Nil	-8,175	522,824,286	-19,796,427	-85,533,604	136,914,589	62,480,567	5,760,132	622,641,368

---

[1] Includes Current liabilities—"Loans and Bills Payable—Minister of Finance". [2] Dates constituent lines were taken over: Canadian Northern, Sept. 30, 1917; Grand Trunk Pacific, Mar. 9, 1919; Grand Trunk, May 21, 1920; Canadian Government Railways, Mar. 31, 1919 (actual date of transfer, Nov. 20, 1918). [3] Exclusive of $14,529,707 for Hudson Bay Railway on Mar. 31, 1919. Appropriation to Dec. 31, 1922, included in total for 1922. [4] Annual report includes Central Vermont funded debt amounting to $9,902,865 and capital stock of $807,600, which are excluded here. [5] Deduction for Hudson Bay Railway $15,245,889. [6] Working capital. [7] Included in Dominion Government Proprietor's Equity.

Table **18** analyses the funds received and expended by the Canadian National Railways. The figures given in Table **19** differ from the figures given in the annual reports of the railways by reason of certain accounting adjustments.

18.—Funds Received and Expended by Canadian National Railways, calendar years 1923-37.

Year.	FUNDS RECEIVED.					
	Funded Debt Held by Public.			Government Loans and Advances.		
	Net Increase in Par Value.	Discount.	Net Capital Received.	Non-active Assets in Public Accounts.	Active Assets in Public Accounts.[1]	Total.
	$	$	$	$	$	$
1923	18,595,912	474,975	18,120,937	60,924,511	Nil	60,924,511
1924	90,814,027	3,251,938	87,562,089	6,786,914	−14,259,436	−7,472,522
1925	17,416,220	795,000	16,621,220	−1,971,859	14,259,436	12,287,577
1926	−5,849,059	Nil	−5,849,059	21,514,832	100,000	21,614,832
1927	55,901,493	2,508,680	53,392,813	1,257,982	−20,000	1,237,982
1928	−3,492,704	1,540,539	−5,033,243	5,947,733	13,426,139	19,373,872
1929	144,670,460	4,063,136	140,607,324	Nil	19,135,461	19,135,461
1930	46,006,370	2,189,458	43,816,912	3,000,157	14,018,942	17,019,099
1931	107,891,344	4,226,030	103,665,314	Nil	−11,652,291	−11,652,291
1932	−11,940,040	Nil	−11,940,040	41,121,217	15,187,500	56,308,717
1933	−9,215,012	"	−9,215,012	Nil	−33,890,312	−33,890,312
1934	−8,971,716	256,250	−9,227,966	"	10,748,048	10,748,048
1935	−91,551,438	921,500	−92,472,938	"	82,019,967	82,019,967
1936	29,833,248	1,898,750	27,934,498	−1,666,898	−31,849,987	−33,516,885
1937	37,385,150	641,662	36,743,488	Nil	−14,742,900	−14,742,900
Totals	**417,494,255**	**22,767,918**	**394,726,337**	**136,914,589**	**62,480,567**	**199,395,156**

Year.	Appropriations for Canadian Government Railways.[2]	Dominion Government Contributions for Deficits.[3]	Change in Working Capital, Sinking Fund and Other Balance Sheet Accounts.	Total.
	$	$	$	$
1923	5,180,620	Nil	+4,445,561	79,780,507
1924	3,594,214	"	+19,221,933	64,461,848
1925	1,886,314	"	−4,231,167	35,026,278
1926	−1,507,605	"	−10,289,976	24,548,144
1927	−1,194,264	2,117,936	+909,613	54,644,854
1928	−5,782,490	4,200,356	−40,838,477	53,596,972
1929	113,000	4,762,217	+69,991,581	94,626,421
1930	1,674,204	6,476,667	−45,316,592	114,303,474
1931	1,765,306	8,712,762	+5,864,446	96,626,645
1932	−39,167	6,635,845[3]	−11,626,267	62,591,622
1933	Nil	112,378,050[4]	+6,530,346	62,742,380
1934	70,000	48,407,901	+2,932,076	47,065,907
1935	Nil	47,421,465	−11,170,848	48,139,342
1936	"	43,303,394	−12,580,298	50,301,305
1937	"	42,345,868	+231,486	64,114,970
Totals	**5,760,132**	**326,762,461**	**−25,926,583**	**952,570,669**

---

[1] Include temporary Government loans shown in annual reports as "Loans and Bills Payable—Minister of Finance". Other loans and bills payable are included in column "Change in Working Capital, ...".

[2] Excludes credits for property transferred to other Government departments—$42,846,400.

[3] Includes deficits for Eastern Lines from July 1, 1927, and for entire system from Jan. 1, 1932.

[4] System (less Eastern Lines) deficit for 1932 of $53,422,662 was paid in 1933, the remaining $783,220 being secured from working capital.

18.—Funds Received and Expended by Canadian National Railways, calendar years 1923-37—concluded.

Year.	FUNDS EXPENDED.						
	Investments.					Cash Deficits.[1]	Total Expenditures.
	Railway Rolling-Stock, Inland Steamships, Communications, and Miscellaneous Properties.	Hotels.	Coastal Steamships.	Affiliated Companies.	Total.		
	$	$	$	$	$	$	$
1923......	54,268,938	695,736	Nil	1,815,640	56,780,314	23,000,193	79,780,507
1924......	41,208,257	606,211	"	2,473,154	44,287,622	20,174,226	64,461,848
1925......	18,290,616	391,724	267,185	6,271,577	25,221,102	9,805,176	35,026,278
1926......	23,187,739	1,263,024	11,774	1,658,228	26,120,765	Cr. 1,572,621	24,548,144
1927......	45,002,322	1,090,905	3,707	4,128,619	50,225,553	4,419,301	54,644,854
1928......	40,157,334	3,871,239	5,580	13,026,571	57,060,724	Cr. 3,463,752	53,596,972
1929......	81,425,585	3,832,827	3,241,495	−6,135,117	82,364,790	12,261,631	94,626,421
1930......	58,175,568	4,928,702	3,456,085	12,066,022	78,626,377	35,677,097	114,303,474
1931......	28,822,800	5,473,456	−9,189	1,371,140	35,658,207	60,968,438	96,626,645
1932......	−1,384,143	2,194,468	−11,166	950,736	1,749,895	60,841,727	62,591,622
1933......	341,819	610,968	207	2,833,998	3,786,992	58,955,388	62,742,380
1934......	−1,274,840	258,841	112	−326,107	−1,341,994	48,407,901	47,065,907
1935......	153,834	535,679	−2,425	30,789	717,877	47,421,465	48,139,342
1936......	6,656,687	267,947	14,947	58,330	6,997,911	43,303,394	50,301,305
1937......	20,970,509	69,871	−165,716	894,438	21,769,102	42,345,868	64,114,970
Totals...	**416,003,025**	**26,091,598**	**6,812,596**	**41,118,018**	**490,025,237**	**462,545,432**	**952,570,669**

[1] See last column of Table 15.

Table **19** has been compiled to reconcile the investments in and loans to the Canadian National Railways (including Canadian Government Railways) as shown in the Public Accounts for the fiscal year ended Mar. 31, 1938, with the debt to the Dominion Government shown in the Railways' balance sheet at Dec. 31, 1937, which is covered by the columns "Dominion Government Proprietor's Equity", "Active Assets in Public Accounts", and "Appropriations for Canadian Government Railways" in Table **17**.

19.—Reconciliation between Public Accounts, Mar. 31, 1938, and Canadian National Railways' Balance Sheet, Dec. 31, 1937, with respect to the Railways' Obligations to the Dominion Government.

Item.	Public Accounts Mar. 31, 1938.	Canadian National Balance Sheet Dec. 31, 1937.
	$	$
Canadian Government Railways—		
Capital expenditures..........	388,204,322	388,204,322
Working capital..........	16,771,981	16,771,981
Canadian National Railways—		
Dominion Government equity..........	287,325,706	287,325,706
Temporary loans..........	21,441,135	62,480,567
Totals..........	**713,743,144**	**754,782,576**
Loans repaid between Dec. 31, 1937 and Mar. 31, 1938..........	Nil	−50,000,000
Additional advances between Dec. 31, 1937 and Mar. 31, 1938..........	"	8,960,568
Totals..........	**713,743,144**	**713,743,144**

Table **20** shows the assets of the Canadian National Railways at Dec. 31, 1922, and at Dec. 31, 1937, with the increase or decrease for the fifteen-year period.

20.—Assets of the Canadian National Railways System, as at Dec. 31, 1922 and 1937.

Account.	Dec. 31, 1922.	Dec. 31, 1937.	Increase (+) or Decrease (−).
	$	$	$
INVESTMENTS—			
Road and equipment	1,765,323,644	1,849,929,233	+84,605,589
Improvements on leased railway property	1,492,123	4,371,294	+2,879,171
Sinking funds	4,629,855	536,970	−4,092,885
Deposits in lieu of mortgaged property sold	6,171,808	5,517,298	−654,510
Miscellaneous physical property	34,767,914	60,638,487	+25,870,573
Affiliated companies	24,253,323	32,536,875	+8,283,552
Other investments	5,789,464	786,592	−5,002,872
TOTALS, INVESTMENTS	1,842,428,131	1,954,316,749	+111,888,618
CURRENT ASSETS—			
Cash	14,651,422	6,461,371	−8,190,051
Special deposits	6,139,435	8,352,772	+2,213,337
Loans and bills receivable	11,600	Nil	−11,600
Traffic and car service balances receivable	2,528,622	1,175,088	−1,353,534
Net balances receivable from agents and conductors	5,386,673	4,254,316	−1,132,357
Miscellaneous accounts receivable	16,857,420	4,683,621	−12,173,799
Dominion Government — balance due on deficit contributions	Nil	11,462,369	+11,462,369
Materials and supplies	41,408,999	29,494,390	−11,914,609
Interest and dividends receivable	377,003	207,525	−169,478
Rents receivable	112,269	53,195	−59,074
Other current assets	106,775	514,964	+408,189
TOTALS, CURRENT ASSETS	87,580,218	66,659,611	−20,920,607
DEFERRED ASSETS—			
Working fund advances	166,847	203,687	+36,840
Insurance and other funds	352,488	11,878,548	+11,526,060
Other deferred assets	11,805,962	6,237,025	−5,568,937
TOTALS, DEFERRED ASSETS	12,325,297	18,319,260	+5,993,963
UNADJUSTED DEBITS—			
Rents and insurance premiums paid in advance	322,059	253,641	−68,418
Discount on capital stock	634,960	189,500	−445,460
Discount on funded debt	1,919,635	11,627,825	+9,708,190
Other unadjusted debits	12,820,903	3,626,055	−9,194,848
TOTALS, UNADJUSTED DEBITS	15,697,557	15,697,021	−536
Grand Totals	**1,958,031,203**	**2,054,992,641**	**+96,961,438**

Subsection 3.—Steam Railway Traffic.

In addition to an analysis of passenger and freight traffic statistics for all steam railways, a separate analysis is given of the operations and traffic of the Canadian National Railways, since, being controlled by the Dominion Government, the information is considered of special interest.

Passenger and Freight Traffic.—The maximum volume of passenger traffic, as indicated by passengers carried one mile, was reached in the calendar year 1919 and the maximum of freight traffic in 1928. In recent years both freight and passenger traffic, especially the latter, have been affected by the increase in the use of motor vehicles and this traffic decrease was much aggravated by the general decline in commercial activity after 1929, but improvements took place in 1934, 1935, 1936, and 1937.

The average haul for freight in Table **21** is the average for all railways, which eliminates the effects of consolidations of railways and of interchanging freight between Canadian railways. The average revenue per passenger increased in 1918 and 1919 with increases in rates, but the increases between 1924 and 1930 were due largely to decreases in the short-haul traffic. The increases in freight-train loading and train revenues have been due to the use of larger and more powerful locomotives.

21.—Summary Analysis of Statistics of Passenger and Freight Services and Receipts, calendar years 1929-37.

NOTE.—Corresponding figures for 1910-15 are given at pp. 628-629 of the 1922-23 Year Book, for the years 1915-19 at pp. 652-653 of the 1937 Year Book, and for 1920-28 at p. 658 of the 1938 Year Book.

Year.	PASSENGERS.				
	Revenue Passenger-Train Miles.[1]	Passenger Car Miles.[1]	Passengers Carried.[2]	Passengers Carried One Mile.	Passengers Carried One Mile per Mile of Line.
	No.	No.	No.	No.	No.
1929	49,076,458	379,458,005	39,070,893	2,897,214,817	70,883
1930	47,915,171	350,905,667	34,698,767	2,422,874,877	58,123
1931	41,984,843	301,350,517	26,396,812	1,748,210,593	41,452
1932	34,995,135	259,396,089	21,099,582	1,435,959,501	33,877
1933	31,942,329	235,680,077	19,172,193	1,393,041,245	32,804
1934	31,665,689	243,236,816	20,530,718	1,530,610,962	36,179
1935	31,997,918	248,061,414	20,031,839	1,584,524,044	37,042
1936	33,221,771	242,618,884	20,497,616	1,726,058,974	40,415
1937	34,543,063	258,353,039	22,038,709	1,929,442,930	45,184

Year.	Average Receipts per Passenger Mile.	Average Receipts per Passenger.	Average Passenger Journey.	Average Passengers per Train.	Passenger-Train Revenue per Passenger-Train Mile.
	cts.	$	miles.	No.	$
1929	2·77	2·06	74	56	2·33
1930	2·76	1·92	70	48	2·02
1931	2·72	1·79	66	39	1·68
1932	2·54	1·73	68	37	1·57
1933	2·29	1·66	73	39	1·50
1934	2·24	1·67	75	43	1·61
1935	2·18	1·72	79	44	1·61
1936	2·08	1·75	84	49	1·68
1937	2·02	1·76	88	53	1·73

Year.	FREIGHT.				
	Revenue Freight-Train Miles.	Revenue Freight-Train Car Miles.[3]	Freight Carried.[4]	Freight Carried One Mile.	Freight Carried One Mile per Mile of Line.
	No.	No.	tons.	tons.	tons.
1929	61,271,673	2,422,571,513	115,187,028	35,025,895,433	856,945
1930	52,537,500	2,077,487,173	96,194,017	29,604,545,125	710,197
1931	44,341,022	1,786,711,340	74,129,694	25,707,373,092	609,555
1932	38,763,206	1,553,486,651	60,807,482	23,136,666,295	545,843
1933	34,647,975	1,456,244,715	57,364,025	21,092,594,200	496,705
1934	38,754,761	1,628,727,881	68,036,505	23,320,451,031	551,220
1935	39,912,286	1,666,893,664	69,141,100	24,235,167,157	566,560
1936	50,219,782[5]	1,795,275,640	75,846,566	26,414,113,720	618,482
1937	52,349,342[5]	1,881,712,546	82,220,374	26,926,054,021	630,557

Year.	Freight Receipts per Ton per Mile.	Receipts per Ton Hauled.	Average Length of Freight Haul.	Average Train Load, Revenue Tons.	Average Load per Loaded Car Mile.	Revenue per Freight-Train Mile.
	cts.	$	miles.	tons.	tons.	$
1929	1·099	3·34	304	523	24·52	5·74
1930	1·090	3·36	308	509	24·34	5·55
1931	1·013	3·51	347	514	24·68	5·20
1932	0·937	3·56	380	517	23·57	4·84
1933	0·955	3·51	368	521	24·92	4·98
1934	0·975	3·34	343	522	24·69	5·09
1935	0·972	3·41	351	528	24·60	5·13
1936	0·969	3·38	348	526	24·73	5·10
1937	1·005	3·29	327	514	23·90	5·17

[1] Includes express, baggage, mail, etc., cars. [2] Duplications included. [3] Includes caboose miles. [4] Duplication eliminated, see Table 22 for details of freight carried. [5] Revised classification includes mileage previously classed as "mixed".

Mileage and Tariffic of the Canadian National Railways.—The Canadian National's steam mileage at Dec. 31, 1937, including lines in the U.S.A., but exclusive of the Northern Alberta Railways and Toronto Terminals Railway (which are controlled jointly by the Canadian National and the Canadian Pacific Railways), was 23,803. Including the Thousand Islands Railway, 4·51, and the Muskegon Railway and Navigation Co., 5·25, controlled but separately operated, the total steam mileage was 23,813. Including 120·26 miles of electric lines, the grand total was 23,933.

The Maritime Freight Rates Act (17 Geo. V, c. 44).—This Act, effective July 1, 1927, ordered that the accounts of the Canadian National lines east of Lévis and Diamond Junction, Quebec, be separated from the remainder of the Canadian National system. These lines were designated the "Eastern Lines" of the Canadian National Railways. The Act ordered that specified freight rates on the Eastern Lines be reduced by 20 p.c. Other railways were allowed to make similar reductions in their freight rates in that territory and to bill on the Board of Railway Commissioners of Canada for the difference in freight receipts due to such reductions. The differences between the reduced rates and the normal rates are treated as revenues by the Canadian National Railways and paid by the Dominion Government. The totals paid to all railways under the Act were: $1,353,464, $2,758,893, $3,092,677, $3,615,218, $2,554,673, $1,922,073, $1,989,130, $2,529,394, $2,348,399, $2,505,823, and $3,182,458, respectively, for the years 1927-37, a total of $27,852,203.

The Quebec Bridge across the St. Lawrence above Quebec city, with a main span of 1,800 ft., carrying a single-track railway and accommodation for motor and pedestrian traffic, forms a connecting link in the Canadian National Railways system and is operated as a part of it.

Table 22 shows some of the more important train traffic statistics of Canadian National Railways operation for the years 1936 and 1937.

22.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, calendar years 1936 and 1937.[1]

Item.		1936.	1937.
Train Mileage—			
Passenger trains	No.	18,174,203	19,285,259
Freight trains	"	28,312,940	29,858,278
Totals, Train Miles[2]	"	**46,487,143**	**49,143,537**
Passenger Train Car Mileage—			
Coaches and combination	No.	50,083,950	54,171,955
Parlour, sleeping, and dining cars	"	39,910,018	42,885,604
Baggage, mail, express, etc.	"	50,515,230	54,248,154
Totals, Passenger Train Car Miles[2]	"	**140,509,198**	**151,305,713**
Freight Train Car Mileage—			
Loaded freight-car miles	No.	687,515,569	730,084,873
Empty freight-car miles	"	308,777,449	321,414,454
Caboose miles	"	27,000,778	28,558,249
Totals, Freight Train Car Miles[2]	"	**1,023,293,796**	**1,080,057,576**
Passenger Traffic—			
Passengers carried (earning revenue)	No.	10,098,973	10,888,476
Passengers carried (earning revenue) one mile	"	831,271,084	953,460,137
Passenger-train miles per mile of road	"	771	813
Average passenger journey	miles	82·31	87·57
Average amount received per passenger	$	1·685	1·740
Average amount received per passenger mile	$	0·0205	0·0199
Average passengers per train mile	No.	45·74	49·44
Average passengers per car mile	"	9·56	10·09
Total passenger-train earnings per train mile	$	1·71	1·75
Total passenger-train revenue per mile of road	$	1,318·56	1,420·65

---

[1] Excludes electric lines.

[2] Work service excluded.

22.—Canadian National Railways (Canadian and U.S. Lines) Train Traffic Statistics, calendar years 1936 and 1937[1]—concluded.

Item.		1936.	1937.
Freight Traffic—			
Revenue freight carried	tons	43,451,052	47,037,720
Revenue freight carried one mile	"	14,813,796,415	15,165,051,267
Non-revenue freight carried one mile	"	1,773,224,970	1,827,673,971
Total (all classes) freight carried one mile	"	16,587,021,385	16,992,725,238
Revenue freight carried one mile per mile of road	"	625,956	636,718
Total (all classes) freight carried one mile per mile of road	"	704,206	716,776
Average tons revenue freight per train mile	No.	523·22	507·90
Average tons (all classes) freight per train mile	"	585·85	569·11
Average tons (all classes) freight per loaded car mile	"	24·13	23·27
Average hauls revenue freight	miles	340·93	322·40
Freight revenues per train mile	$	5·14	5·15
Freight revenues per mile of road	$	6,176·73	6,487·38
Freight revenues per ton	$	3·34832	3·26964
Freight revenues per ton mile	$	0·00982	0·01014

---

[1] Excludes electric lines.

Commodities Hauled.—In Table 23, the duplications from two or more railways handling the same freight have been eliminated. The peak year was 1928 when agricultural products hauled amounted to 30,176,695 tons.

23.—Commodities Hauled as Freight on Steam Railways, calendar years 1933-37.

Note.—In this table duplications are eliminated, *i.e.*, the same freight handled by two or more railways is counted only once. In this respect these figures differ from those in the corresponding table in the 1926 and previous Year Books.

Group and Product.	1933.	1934.	1935.	1936.	1937.
	tons.	tons.	tons.	tons.	tons.
Agricultural Products.					
Wheat	8,900,296	8,454,195	8,367,973	8,489,009	5,144,261
Corn	456,074	435,111	296,711	486,471	488,124
Oats	889,008	1,073,495	858,724	879,304	906,651
Barley	385,460	635,696	455,496	911,444	713,484
Rye	75,900	40,901	55,001	89,506	69,858
Flaxseed	42,159	20,814	28,762	54,352	42,822
Other grain	59,368	46,022	34,746	31,717	36,356
Flour	1,554,312	1,481,241	1,368,244	1,490,529	1,374,435
Other mill products	1,327,833	1,460,786	1,464,264	1,694,477	1,615,134
Hay and straw	250,961	495,307	415,787	300,175	670,618
Cotton	109,925	124,504	115,676	130,102	127,217
Apples (fresh)	321,001	322,730	288,999	249,381	272,577
Other fruit (fresh)	310,424	365,286	394,769	425,155	422,207
Potatoes	412,784	504,210	407,969	455,178	550,738
Other fresh vegetables	232,277	261,652	234,297	275,803	293,227
Other agricultural products	831,101	907,976	928,702	1,033,223	1,005,017
Totals, Agricultural Products	**16,158,883**	**16,629,926**	**15,716,120**	**16,995,826**	**13,732,726**
Animal Products.					
Horses	41,341	63,382	53,707	71,436	88,170
Cattle and calves	408,879	475,712	500,044	590,311	637,898
Sheep	56,725	52,619	48,589	48,488	45,972
Hogs	249,457	230,313	200,177	242,567	231,676
Dressed meats (fresh)	457,986	525,446	469,815	487,812	450,145
Dressed meats (cured, salted, canned)	167,105	188,326	146,528	155,325	165,993
Other packing-house products (edible)	213,420	204,647	120,536	139,412	146,072
Poultry	118,960	107,673	80,663	91,962	81,094
Eggs	130,423	128,168	99,443	92,217	89,797
Butter	166,648	157,321	135,052	135,123	136,229
Cheese	59,878	62,834	63,301	72,167	70,055
Wool	50,086	38,985	47,783	48,765	43,774
Hides and leather	121,425	119,110	139,447	134,013	128,879
Other animal products (non-edible)	76,693	91,167	106,112	121,647	124,995
Totals, Animal Products	**2,319,026**	**2,445,703**	**2,211,197**	**2,431,245**	**2,440,749**

23.—Commodities Hauled as Freight on Steam Railways, calendar years 1933-37—concluded.

Group and Product.	1933.	1934.	1935.	1936.	1937.
	tons.	tons.	tons.	tons.	tons.
Mineral Products.					
Anthracite coal	2,302,021	2,786,704	2,629,229	2,749,701	2,876,804
Bituminous coal	7,926,628	9,585,322	9,174,105	9,957,019	10,720,545
Lignite coal	2,348,738	2,467,519	2,574,087	2,749,419	2,564,100
Coke	1,125,900	1,328,019	1,242,068	1,351,663	1,286,666
Iron ore	7,668	12,052	15,089	11,474	15,529
Copper ore and concentrates	14,791	20,109	12,534	11,114	502,609
Other ores and concentrates	926,486	2,001,416	2,078,721	2,687,307	4,151,023
Base bullion, matte, pig and ingot (non-ferrous metals)	461,950	709,803	864,727	975,969	1,091,003
Sand and gravel	677,865	1,054,855	1,179,721	1,286,601	2,123,789
Stone (crushed, ground, broken)	500,439	785,336	576,911	1,069,223	1,805,278
Slate, dimension or block stone	79,657	84,449	139,709	106,824	121,607
Crude petroleum	394,021	463,488	460,559	510,701	435,085
Asphalt (natural, by-product petroleum)	89,308	126,693	181,940	185,177	298,307
Salt	257,413	289,290	286,459	289,890	298,439
Other mineral products	1,269,154	1,945,133	2,676,793	2,840,608	2,920,534
Totals, Mineral Products	**18,382,039**	**23,660,188**	**24,092,652**	**26,782,690**	**31,211,318**
Forest Products.					
Logs, posts, poles, piling	740,532	949,184	1,156,773	1,060,497	1,251,082
Cordwood and other firewood	1,393,579	1,568,669	1,421,851	1,367,039	1,199,772
Ties	32,830	43,043	56,495	57,317	82,310
Pulpwood	1,395,709	2,023,577	2,146,535	1,973,201	2,619,607
Lumber, timber, box, crate, and cooperage material	2,395,982	2,866,283	3,058,689	3,441,123	4,015,125
Other forest products	306,325	440,364	422,024	401,875	496,983
Totals, Forest Products	**6,264,957**	**7,891,120**	**8,262,367**	**8,301,052**	**9,664,879**
Manufactures and Miscellaneous.					
Gasoline	1,159,067	1,233,554	1,200,347	1,222,559	1,409,851
Petroleum oils and other petroleum products (except asphalt and gasoline)	654,401	742,067	746,311	766,283	803,385
Sugar	280,986	306,764	310,590	332,455	447,684
Iron, pig and bloom	96,470	178,652	176,539	225,977	297,577
Rails and fastenings	19,788	78,268	76,057	87,876	96,226
Iron and steel (bar, sheet, structural pipe)	420,167	703,674	944,279	1,208,435	1,654,574
Castings, machinery, and boilers	145,400	162,083	181,658	237,314	307,525
Cement	350,577	485,313	432,694	534,028	769,026
Brick and artificial stone	118,758	195,755	207,344	264,392	341,214
Lime and plaster	182,285	193,794	204,078	232,018	267,465
Sewer pipe and drain tile	19,666	19,750	26,237	28,759	30,981
Agricultural implements and vehicles other than automobiles	64,071	104,484	150,466	168,299	249,405
Automobiles, trucks, and parts	935,248	1,427,551	1,772,595	1,815,404	2,110,205
Household goods and settlers' effects	52,427	68,660	42,311	40,760	68,115
Furniture	42,173	40,672	45,260	54,601	61,445
Liquor, beverages	141,829	236,608	253,426	295,859	355,349
Fertilizers, all kinds	425,050	525,347	569,208	667,585	772,435
Newsprint paper	1,469,657	1,939,326	1,968,278	2,366,404	2,748,810
Other paper	349,650	342,280	368,683	416,019	558,601
Paper board, pulpboard and wall board (paper)	163,834	205,281	228,075	253,222	286,691
Wood-pulp	750,886	802,486	884,013	994,833	1,098,013
Fish (fresh, frozen, cured, etc.)	70,314	67,501	74,294	80,703	88,868
Canned goods (all canned food products except meats)	363,606	396,081	420,439	480,440	489,708
Other manufactures and miscellaneous	3,950,099	4,723,238	5,426,354	6,298,783	7,390,637
Merchandise (all L.C.L. freight)	2,012,711	2,230,379	2,149,228	2,262,745	2,466,912
Totals, Manufactures and Misc.	**14,239,120**	**17,409,568**	**18,858,764**	**21,335,753**	**25,170,702**
Grand Totals	**57,364,025**	**68,036,505**	**69,141,100**	**75,846,566**	**82,220,374**

Railway Accidents.—The numbers of passengers, employees, and others killed or injured in steam railway accidents are given in summary form from 1929 to 1937 in Table 24, and in detailed analysis for 1935 to 1937 in Table 25. All injuries to passengers are included, but for employees only injuries which keep the employee from his work for at least three days during the ten days following the accident are recorded.

24.—Numbers of Passengers, Employees, and Others Killed or Injured on Steam Railways, calendar years 1929-37.

NOTE.—For the years ended June 30, 1888 to 1900, see Canada Year Book, 1910, p. 378; for the years 1901-19, the 1922-23 edition, p. 635; and for 1920-28, the 1938 edition p. 662.

Year.	Passengers.		Employees.		Others.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1929	20	551	118	12,483	293	809	431	13,843
1930	15	548	103	9,678	345	837	463	11,063
1931	3	399	55	5,966	202	830	260	7,195
1932	7	342	77	4,631	242	598	326	5,571
1933	8	319	53	4,409	219	645	280	5,373
1934	16	432	57	5,179	242	589	315	6,200
1935	10	440	70	5,221	271	625	351	6,286
1936	6	691	93	6,338	282	703	381	7,732
1937	4	427	77	5,774	265	729	346	6,930

During 1937, 4 passengers were killed and 379 injured in train accidents, as against 6 killed and 657 injured in 1936. The number of employees killed was also reduced from 83 to 59 and the number injured from 1,293 to 1,082; the numbers of other persons killed and injured were 263 and 659, as against 273 and 622, respectively, in 1936. All the increase in other persons injured was in the number of trespassers which rose from 186 to 272. These were persons stealing rides on trains, walking on the right-of-way, and also persons crossing the railways at highway crossings when the gates were down. There were 2 fewer persons killed at highway crossings, but 48 more were injured than in 1936. These increases were all motorists, the number injured jumping from 266 to 323 and the number of motorists killed increasing from 105 to 109.

These accidents include all accidents in which railway trains were involved and accidents on railway property. The classification of accidents used in the Bureau's vital statistics classes collisions between motor vehicles and trains as motor vehicle accidents; also provincial statistics of motor vehicle accidents class them as motor vehicle accidents and consequently adjustments should be made when compiling total accidental deaths of all kinds or comparing results of accidents of different kinds, such as train and motor vehicle.

25.—Numbers of Persons Killed or Injured on Steam Railways, calendar years 1935-37.

Item.	In Accidents Resulting from Movement of Trains, Locomotives or Cars					
	1935.		1936.		1937.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Class of Persons—						
Passengers	10	432	6	657	4	379
Employees	43	1,026	83	1,293	59	1,082
Trespassers	145	237	150	186	148	272
Non-trespassers	123	294	122	358	114	339
Postal clerks, expressmen, etc	1	74	1	78	1	48
Totals	**322**	**2,063**	**362**	**2,572**	**326**	**2,120**
Description of Accidents (Employees and Passengers only)—						
Coupling and uncoupling	3	43	3	68	1	70
Collisions	4	46	27	265	6	41
Derailments	2	62	6	76	12	63
Parting of trains	Nil	10	Nil	Nil	Nil	2
Locomotives or cars breaking down	“	Nil	“	“	“	3
Falling from trains or cars	14	87	7	137	6	142
Getting on or off trains	6	283	5	285	Nil	Nil
Struck by trains, etc	18	63	23	56	26	39
Overhead obstruction	Nil	1	Nil	2	Nil	2
Other causes	6	863	18	1,061	12	1,099
Totals	**53**	**1,458**	**89**	**1,950**	**63**	**1,461**

25.—Numbers of Persons Killed or Injured on Steam Railways, calendar years 1935-37—concluded.

Class of Persons.	In Accidents other than those Resulting from Movement of Trains, Locomotives, or Cars.					
	1935.		1936.		1937.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Stationmen	1	491	2	592	2	692
Shopmen	6	1,377	1	1,518	3	1,584
Trainmen and trackmen	19	2,105	6	2,706	12	2,164
Other employees	1	222	1	229	1	252
Passengers	Nil	8	Nil	34	Nil	48
Others	2	20	9	81	2	70
Totals	**29**	**4,223**	**19**	**5,160**	**20**	**4,810**

Section 2.—Electric Railways.*

The cheap and reasonably rapid conveyance of human beings is a necessity of modern urban life. One important means by which this necessity is supplied throughout Canada is the electric street railway, operated by hydro-electric energy in the majority of cases.

Historical.—Replacing the horse-car systems, used in Montreal and Toronto as early as 1861, electric street railways were first seen in operation in Canada in 1885, when a successful experimental railway was constructed and operated at the Toronto Exhibition Grounds. Before many years their safety and convenience resulted in the discarding of the older systems. The first electric railway line in Canada and probably the first in North America, which ran between Windsor and Walkerville, was established early in June, 1886 (it is recorded that it was in active operation before June 11). An electric system 7 miles in length was opened at St. Catharines in 1887, using the double overhead trolley. The third electric railway in the Dominion was established in Victoria on Feb. 23, 1890, and the fourth commenced operation in Vancouver in June, 1890. These were followed by the completion of the Ottawa Electric Railway in 1891 and the electrification of the Montreal and Toronto systems in 1892. The street railways of other eastern cities were generally electrified during the 1890's, while in the newer western cities electricity was used from the commencement. In the cities of Eastern Canada, electric street railways are generally operated by private companies under city franchises, while in a considerable number of cities in Ontario and the West the street railways are owned and operated by the municipalities, a fact indicated in Table 28.

Many difficulties are met in operating the cars during the winter season, owing to the heavy falls of snow. This, however, has been overcome by the use of sweepers, scrapers, and ploughs. The single overhead trolley system has been found the most suitable and is in general use. During the past few years an increasing number of motor buses have been used; in 1924 only 48 were operated, but by 1937 the number had increased to 653. In 1936 the Montreal system secured 7 trackless trolley buses. These cars have pneumatic tires, require no track but use a second trolley wire instead of the steel rail for the return of the electric current.

In addition to street railways in the cities there are several systems serving suburban areas and also doing an inter-urban business, but this latter class of service is fast being supplanted by bus service. Indeed the development of motor vehicles, while providing competition for all forms of rail transportation, has affected electric railways more seriously than steam railways. The dependence of the former upon short-distance passenger traffic renders them particularly susceptible to the competition of motor vehicles. Since the War, a number of electric railways have been abandoned, first main track mileage has declined 29 p.c. since 1925 while even in the larger cities electric railways have generally been obliged to increase their tariffs owing to the slow growth or actual decline of traffic.

---

* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report on Electric Railways in Canada.

Subsection 1.—Equipment of Electric Railways.

Table **26** shows details of the track mileage and of the rolling-stock of electric railways in the four latest years. Statistics of the first and second main track mileage in each year since 1929 will be found in Table **29**, and of the mileage operated by individual companies in Table **28**.

26.—Mileage and Equipment of Electric Railways, calendar years 1934-37.

Item.	1934.	1935.	1936.	1937.	Equipment.	1934.	1935.	1936.	1937.
	miles.	miles.	miles.	miles.		No.	No.	No.	No.
Length of first main track	1,286	1,268	1,247	1,222	Passenger Cars— Closed	3,438	3,395	3,329	3,303
Length of second main track	557	558	553	549	Open	19	21	17	13
					Combination passenger and baggage	9	11	9	13
Totals, Main Track	1,843	1,826	1,800	1,771	Without electrical equipment	282	280	250	249
Length of sidings and turnouts	272	270	272	267	**Totals, Passenger Cars**	**3,748**	**3,707**	**3,605**	**3,578**
Totals, Computed as Single Track	**2,115**	**2,096**	**2,072**	**2,038**	Trackless trolley cars	Nil	Nil	7	7
					Baggage, express, and mail cars	22	23	23	24
					Freight cars	276	270	206	203
					Buses	537	552	605	653
					Snow ploughs	66	69	72	71
					Sweepers	158	162	162	161
					Miscellaneous	344	340	348	344
					Locomotives	47	46	46	46

Subsection 2.—Finances of Electric Railways.

Table 27 gives financial statistics of electric railways for each year since 1929 and Table 28 financial statistics of individual companies in the latest year.

27.—Financial Statistics of Electric Railways, calendar years 1929-37.

Note.—Available figures for the years 1901-07 are given at pp. 608 and 609 of the 1926 Year Book; for the years 1908-18 at pp. 681 and 682 of the 1936 Year Book; and for 1919-28 at p. 665 of the 1938 Year Book.

Calendar Year.	Capital Liability.			Investment in Road and Equipment.	Gross Earnings.	Operating Expenses.	Ratio of Expenses to Receipts.	Employees.	Salaries and Wages.
	Stocks.	Funded Debt.	Total.						
	$	$	$	$	$	$	p.c.	No.	$
1929	54,453,321	167,969,494	222,422,815	240,110,655	58,268,980	40,085,140	68·79	18,801	26,984,061
1930	53,048,929	171,040,610	224,089,539	240,293,974	54,719,259	39,125,515	71·50	18,340	26,954,994
1931	45,155,649	170,662,447	215,818,096	234,384,558	49,088,310	35,367,068	72·05	17,135	24,647,391
1932	40,101,930	163,210,624	203,312,554	225,747,251	43,339,381	31,516,943	72·72	15,961	21,534,419
1933	39,851,230	160,247,640	200,098,870	223,704,367	39,383,965	27,917,265	72·73	14,883	18,692,236
1934	39,851,230	158,276,141	198,127,371	224,398,598	40,048,136	28,036,754	70·01	14,544	18,546,750
1935	36,827,740	170,363,299	207,191,039	215,007,166	40,442,320	28,009,013	69·26	14,381	18,649,517
1936	36,727,740	168,334,613	205,062,353	214,820,798	41,391,927	28,807,311	69·60	14,280	18,958,832
1937	36,727,740	169,045,069	205,772,809	208,938,656	42,991,444	29,545,641	68·72	14,347	19,778,118

28.—Mileage, Capital, Earnings, Operating Expenses, Passengers, Employees, and Salaries and Wages of Electric Railways in Canada, calendar year 1937.

Name of Railway.	Mileage Operated (Total Main Track).	Capital Liability.	Gross Earnings.	Operating Expenses.	Fare Passengers Carried.	Employees.	Salaries and Wages.
	miles.	$	$	$	No.	No.	$
Brantford Municipal[1]	17·81	827,444	114,482	99,115	2,322,882	53	61,103
British Columbia	289·38	23,847,809[2]	5,281,970	4,270,471	71,405,282	2,060	3,180,616
Calgary Municipal[1]	77·02	2,855,644	655,074	523,505	10,473,024	211	312,294
Canadian Pacific	75·30	4,368,500[3]	452,208	390,372	777,184	223	276,598
Cape Breton Tramways	21·30	5,400	86,737	81,036	1,063,729	41	48,119
Cornwall St. Rly., Light and Power Co.	5·50	330,000	154,961	79,051	1,574,663	46	64,382
Edmonton Radial[1]	52·50	962,400	689,394	520,492	14,024,017	275	376,165
Fort William Street[1]	25·49	864,000	131,225	137,941	2,100,631	76	83,058
Guelph Radial[1,4,5]	[6]	[6]	63,449	62,392	935,724	[6]	31,777
Hamilton Street[4,7]	40·17	3,205,000	1,135,885	768,167	16,950,449	347	436,700
Hull Electric	26·73	292,000	192,431	142,113	2,664,315	85	80,268
International Transit	6·14	150,000	47,974	37,170	949,364	18	25,596
Kitchener Public Utilities—St. Rly. Dept.[1]	9·41	96,334	102,610	71,982	2,344,835	35	50,027
Lethbridge Municipal[1]	11·25	455,167	36,427	38,240	696,822	17	26,116
Levis Tramways Co.	11·50	1,115,000	114,739	107,238	1,858,869	68	70,167
London and Port Stanley (Lessees)	26·70	1,318,661[8]	265,921	210,105	407,141	83	110,239
London and Port Stanley (Lessors)[1]	-	1,775,194	-	-	-	-	-
London Street	9·46	1,037,480	499,802	427,120	8,951,909	191	237,527
Montreal Tramways	272·47	55,159,900	13,055,920	7,952,633	208,208,793	4,000	5,333,747
Montreal and Southern Counties	54·09	2,707,703[9]	286,347	347,258	2,249,844	178	202,906
Nelson Municipal[1]	3·38	[6]	16,586	28,831	388,976	17	18,613
New Brunswick Power Co.	23·00	2,817,249[2]	297,623	284,017	5,991,050	126	138,237
Niagara, St. Catharines, and Toronto	59·20	925,000[10]	656,670	592,431	3,500,828	292	361,637
North Yonge Railways[1,11]	10·25	107,549[2]	70,297	68,805	838,121	[11]	[11]
Nova Scotia Light and Power Co.	24·91	2,442,508[2]	543,364	406,696	9,266,951	173	288,099
Oshawa	9·06	40,000[10]	319,638	162,696	651,129	94	110,501
Ottawa	51·74	3,897,899	1,319,400	810,840	21,122,783	427	545,704
Port Arthur Civic[1]	19·53	396,634	144,750	112,879	2,317,422	57	74,740
Quebec Railway, Light, and Power Co.[12]	38·14	[12]	888,379	840,196	14,947,587	389	442,041
Regina Municipal[1]	28·62	2,008,018	292,916	228,928	5,449,710	104	159,734
Sandwich, Windsor, and Amherstburg[1]	61·02	6,816,205	611,612	550,313	9,161,756	202	336,782
Saskatoon Municipal[1]	23·35	1,291,366	224,351	167,338	3,665,629	83	109,689
Shawinigan Falls Terminal	3·39	358,507	98,831	71,310	[6]	19	32,045
Suburban Rapid Transit Co.	9·53	600,000[13]	120,704	90,556	2,070,022	[14]	[14]
Sudbury, Copper Cliff Suburban	7·90	214,983	82,267	65,345	1,063,975	23	32,062
Toronto Transportation Commission[1]	214·93	24,886,000	10,672,750	6,261,209	154,851,715	3,193	4,697,311
Township of York and Town of Weston[1,11]	14·06	996,534	212,348	152,477	4,271,016	[11]	[11]
Winnipeg	96·89	55,700,721[13]	2,934,832	2,286,349	41,579,017	1,109	1,389,093
Winnipeg, Selkirk, and Lake Winnipeg	39·66	900,000[13]	116,570	98,024	797,498	32	34,425
Totals	**1,770·78**	**205,772,809**	**42,991,444**	**29,545,641**	**631,894,662**	**14,347**	**19,778,118**

---

[1] Municipally owned. [2] Investment in road and equipment. [3] $4,264,725 held by Canadian Pacific Railway. [4] Operated by the Hydro-Electric Power Commission of Ontario. [5] Ceased operation Sept. 30, 1937. [6] Not reported. [7] Provincially owned. [8] Debentures of the London Rly. Commission. [9] $310,500 held by C.N.R. and $189,500 included in stock outstanding of C.N.R. [10] Held by C.N.R. [11] Operated by Toronto Transportation Commission. [12] Citadel division operations only. Total capital and operations of the Montmorency division are included in steam railways. [13] Represents all divisions of the company. [14] Operated by Winnipeg Electric Railway.

Subsection 3.—Traffic of Electric Railways.

The most important traffic statistics for electric railways are given for each year since 1929 in Table 29; passenger traffic on individual railways is included in Table 28; accidents to passengers and employees are given in Table **30**.

29.—Summary Statistics of Electric Railway Operation, calendar years 1929-37.

NOTE.—Figures will be found at p. 676 of the 1933 Year Book for the years 1901-10; at p. 681 of the 1936 Year Book for the years 1911-18; and at p. 667 of the 1938 Year Book for 1919-28.

Year.	Mileage in Operation.		Car Mileage.			Passengers.	Freight.
	First Main Track.	Second Main Track.	Passenger.	Other.	Total.		
	miles.	miles.	miles.	miles.	miles.	No.	tons.
1929........	1,629·12	565·27	134,666,564	4,533,070	139,199,634	833,496,866	3,653,411
1930........	1,500·52	571·37	136,240,958	3,773,642	140,014,600	792,701,493	2,872,929
1931........	1,379·03	572·69	131,200,894	2,682,595	133,883,489	720,468,361	1,977,441
1932........	1,306·30	560·02	123,672,220	2,213,081	125,885,301	642,831,002	1,509,561
1933........	1,297·63	559·57	117,100,127	2,062,669	119,162,796	585,385,094	1,547,202
1934........	1,286·16	557·14	117,678,030	2,357,595	120,035,625	595,143,903	1,939,833
1935........	1,268·31	557·83	118,263,764	2,552,585	120,816,349	600,728,313	2,057,897
1936........	1,247·09	552·77	119,779,505	2,465,384	122,244,889	614,890,897	2,265,023
1937........	1,221·88	548·90	122,750,869	2,559,953	125,310,822	631,894,662	2,612,928

30.—Numbers of Passengers, Employees, and Others Killed or Injured on Electric Railways, calendar years 1929-37, with Totals from 1894 to June 30, 1929.

NOTE.—Details for years ended June 30, 1900-19, are given on p. 611 of the 1926 Year Book, and for the years ended 1920-28 at p. 667 of the 1938 Year Book.

Calendar Year.	Passengers.		Employees.		Others.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Totals, 1894 to June 30, 1929....	**304**	**45,118**	**264**	**17,014**	**1,391**	**20,549**	**1,959**	**82,681**
1929..............................	5	2,808	5	1,200	93	1,372	103	5,380
1930..............................	8	2,790	6	1,003	50	1,269	64	5,062
1931..............................	1	2,245	3	758	61	1,144	65	4,147
1932..............................	3	2,098	2	565	74	879	79	3,542
1933..............................	Nil	1,385	1	333	32	1,184	33	2,902
1934..............................	4	1,666	2	279	49	734	55	2,679
1935..............................	1	1,517	2	388	61	652	64	2,557
1936..............................	Nil	1,503	2	280	41	651	43	2,434
1937..............................	"	1,566	2	364	43	679	45	2,609

Section 3.—Express Companies.*

"Express service is an expedited freight service on passenger trains." But express companies do not own the means of performing their services; they use railway facilities by virtue of contracts with the railway companies. Express companies in Canada have had close relations with the railways practically from the beginning. A brief history of the various express companies will be found on pp. 611-612 of the 1926 Year Book.

Goods are sent by express for quick transit, so that express rates do not compete with freight rates. Thus in its first tariff the Dominion Express Co., in pursuance of its contract with the Canadian Pacific Railway, gave a rate of 2½ times the maximum first-class railway freight rate for the same goods carried the same distance. The majority of the contracts between express and railway companies for carrying express freight are on the basis of a percentage of the gross express revenue. The rates are subject to the approval of the Board of Transport Commissioners.

Express Company Operations.—During 1937, three Canadian and one American express organizations operated in Canada. The Canadian Pacific Express Co., formerly the Dominion Express Co., is a subsidiary of the Canadian Pacific Railway and handles the express business on the railways and the inland and ocean steamship lines of the parent company. The express business of the Canadian National system and Northern Alberta railway is handled by departments of the respective railways. The Railway Express Agency, Inc., operates over the Canadian sections of United States railways and over the route from Skagway to points in Yukon. These companies are all organized under powers conferred by Acts of the Dominion Parliament and their business consists in the expeditious shipment of valuable live stock, and such perishable commodities as fresh fish, fruit, etc., the forwarding of parcels and baggage, and the issue of money orders, travellers cheques, letters of credit, and other forms of financial paper. No statistics are available regarding the volume of traffic carried by express. Much of the traffic, of course, consists of parcels and small lots which would make statistical classification and measurement very difficult. However, there is also an important movement in car lots of live stock, fresh fish, fruit, vegetables, and other perishable commodities.

---

* Revised and checked by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues an annual report on Express Statistics.

In the following tables the amounts paid by express companies to the carriers, *i.e.*, railways, steamship lines, etc., for transporting the express matter, are shown under the heading "Express Privileges". Of the total of 62,634 miles operated in 1937, 42,195 were over steam railways, 280 over electric railways, 14,227 on ocean steamship services (mainly by the Canadian Pacific lines), 4,606 miles on inland or coastal steamboat routes, 490 by aircraft, and 835 miles over highways by motor trucks.

31.—Summary Statistics of Revenues and Expenses of Express Companies, calendar years 1929-37.

NOTE.—Corresponding figures for the years ended June 30, 1911-18, are given at p. 673 of the 1927-28 Year Book, and for the years 1919-28 at p. 669 of the 1938 edition.

Calendar Year.	Gross Earnings.	Operating Expenses.	Express Privileges.	Net Operating Revenues.
	$	$	$	$
1929	27,758,385	13,480,028	13,598,575	679,782
1930	24,352,181	12,759,439	12,380,060	−787,318
1931	20,115,285	11,292,957	10,909,184	−2,086,856
1932	16,870,806	9,479,802	7,307,980[1]	83,024
1933	15,226,015	8,497,892	6,605,225	122,898
1934	16,206,171	8,473,601	7,268,616	463,954
1935	16,592,746	8,960,675	7,352,913	279,158
1936	17,169,315	9,414,746	7,478,874	275,695
1937	17,937,567	9,878,443	7,749,711	309,413

[1] Decrease due in part to revision of basis of payment by Canadian Pacific Express Co.

32.—Revenues, Expenses, and Operating Mileage of Express Companies, by Companies, calendar years 1936 and 1937.

Company.	Gross Earnings.	Operating Expenses.	Express Privileges.	Net Operating Revenues.	Mileage Operated.
	$	$	$	$	miles.
1936.					
Canadian National Railways	8,628,310	4,686,520	3,835,381	106,409	24,104
Canadian Pacific Express	7,926,998	4,464,075	3,323,849	139,074	33,250
Northern Alberta Railways	121,069	38,940	65,895	16,234	928
Railway Express Agency	492,938	225,211	253,749	13,978	4,864
Totals, 1936	**17,169,315**	**9,414,746**	**7,478,874**	**275,695**	**63,146**
1937.					
Canadian National Railways	9,069,258	4,893,525	4,036,020	139,712	24,141
Canadian Pacific Express	8,256,260	4,704,899	3,412,607	138,754	33,211
Northern Alberta Railways	134,046	43,081	73,300	17,665	928
Railway Express Agency	478,003	236,937	227,784	13,282	4,354
Totals, 1937	**17,937,567**	**9,878,442**	**7,749,711**	**309,413**	**62,634**

33.—Business Transacted by Express Companies in Financial Paper, calendar years 1933-37.

Description.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Money orders, domestic	34,696,463	40,115,447	44,560,510	52,581,553	56,083,053
Money orders, foreign	511,561	431,533	502,438	577,720	734,558
Travellers cheques, domestic	2,549,571	3,352,438	2,997,849	3,150,798	3,400,957
Travellers cheques, foreign	832,488	952,267	1,186,495	1,593,840	1,518,306
"C.O.D." cheques	4,186,525	4,649,004	4,839,649	5,007,286	5,182,043
Telegraphic transfers	271,682	252,457	249,173	212,860	206,838
Other forms	531,322	481,750	492,967	424,863	397,527
Totals	**43,579,612**	**50,234,896**	**54,829,081**	**63,548,920**	**67,523,282**

PART III.—ROAD TRANSPORTATION.*

Since the recent development of highways in Canada has been almost exclusively for the purpose of providing roadbed for motor vehicle traffic, highways and motor vehicles have been treated since the 1937 edition as related features of transportation, instead of being dealt with in separate parts of the chapter as in former editions. After an introductory section which briefly summarizes provincial regulations regarding motor vehicles and motor traffic, the whole subject of road transportation is dealt with under the headings of facilities, finances, and traffic, similarly to the treatment of other forms of transportation.

Section 1.—Provincial Motor Vehicle and Traffic Regulations.†

NOTE.—In this Section, it is obviously impossible to include the great mass of detailed regulations in force in each province. The purpose in view is to provide only the more important general information. For detailed regulations for specific provinces the sources of information are given on pp. 661-662. See also "The Highway and Motor Vehicle in Canada", an annual bulletin published by the Dominion Bureau of Statistics and obtainable from the Dominion Statistician, price 25 cents.

General.—The licensing of motor vehicles and the regulation of motor vehicle traffic lies within the legislative jurisdiction of the Provincial Governments in Canada. Regulations which apply in all the provinces may be summarized as follows:—

Operators Licences.—The operator of a motor vehicle must be over a specified age (usually 16 years) and must carry a licence, obtainable only after prescribed qualification tests and renewable annually. Special licences are required for chauffeurs.

Motor Vehicle Regulations.—In general, all motor vehicles and trailers must be registered annually, usually for the calendar year, with the payment of specified fees, and must carry two registration plates, one on the front and one on the back of the vehicle (one only, for the back, in the case of trailers). A change in ownership of the vehicle must be recorded with the registration authority. However, exception from registration is granted for a specified period (usually at least 90 days) in any year to visiting private vehicles registered in another province or a State which grants reciprocal treatment. Further regulations require a safe standard of efficiency in the mechanism of the vehicle and in its brakes, and provide for its equipment with non-glare headlights and a proper rear light, with a satisfactory locking device, a muffler, a windshield wiper, and a rear-vision mirror.

---

* Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch publishes an annual report "The Highway and Motor Vehicle in Canada".

† The information in this Section has been revised from material provided by the officials in charge of the administration of Motor Vehicle and Traffic Acts and Regulations in the individual provinces.

Traffic Regulations.—In all the provinces, vehicles keep to the right-hand side of the road. Motorists are everywhere required to observe traffic signs, lights, etc., placed at strategic points on highways and roads. While permissible speeds vary in different provinces, slower speeds are always required in cities, towns, and villages, in passing schools and public playgrounds, at road intersections, railway crossings, or at other places or times where the view of the highway for a safe distance ahead is in any way obscured. Motor vehicles must not pass a street car which has stopped to take on or discharge passengers except where safety zones are provided. Accidents resulting in personal injury or property damage must be reported to a provincial or municipal police officer and any driver involved must not leave the scene of accident until he has rendered all possible aid.

Penalties.—These ascend in scale from small fines for minor infractions of any of the regulations to a suspension of the operator's driving permit, impounding of the car or imprisonment for serious infractions, recklessness, driving without an operators licence, and especially for attempting, while intoxicated, to operate a motor vehicle.

There is such wide variation in the different provinces regarding the basis of licences and fees, the regulation of public commercial vehicles, details of traffic rules, speed, and the use of motor vehicles, that it is impossible even to outline them satisfactorily in the space available here. The most important features are summarized in the annual bulletin referred to in the headnote to this Section, p. 660. The authorities responsible for the administration of motor vehicles and the legislation governing vehicles and traffic are given below for each province.

Prince Edward Island.—*Administration.*—The Provincial Secretary, Charlottetown. *Legislation.*—The Highway Traffic Act (c. 2, 1936) and amendments.

Nova Scotia.—*Administration.*—Motor Vehicle Branch, Department of Highways, Halifax. *Legislation.*—The Motor Vehicle Act (c. 6, 1932) and amendments and the Motor Carrier Act (c. 78, R.S.N.S. 1923) as amended by c. 29, 1937.

New Brunswick.—*Administration.*—Motor Vehicle Branch, Department of Public Works, Fredericton. *Legislation.*—The Motor Vehicle Act (c. 20, 1934).

Quebec.—*Administration.*—Motor Vehicle Bureau, Provincial Revenue Offices, Treasury Department, Quebec. *Legislation.*—The Motor Vehicle Act (c. 35, R.S.Q. 1925) and amendments.

Ontario.—*Administration.*—Motor Vehicles Branch, Department of Highways, Toronto. *Legislation.*—The Highway Traffic Act. (c. 288, R.S.O. 1937) and amendments.

Manitoba.—*Enforcement.*—Attorney General. *Registrations.*—Treasurer, Revenue Office, Winnipeg. *Legislation.*—The Highway Traffic Act (c. 19, 1930) and amendments.

Saskatchewan.—*Administration.*—Motor Licence Division, Provincial Tax Commission, Revenue Building, Regina. *Legislation.*—The Vehicles Act (c. 68, 1935) and amendments.

Alberta.—*Administration.*—Motor Vehicle Branch, Department of the Provincial Secretary, Edmonton, and Alberta Highway Traffic Board, Edmonton. *Legislation.*—The Vehicles and Highway Traffic Act (c. 31, 1924) and amendments, and Public Service Vehicles Act (c. 91, 1936).

British Columbia.—*Legislation.*—The Motor Vehicle Act (c. 195, R.S.B.C. 1936) and the Highway Act (c. 116, R.S.B.C. 1936) and amendments. Administration of the Motor Vehicle Act and enforcement of the Highway Act is vested in the Commissioner of Provincial Police, Victoria, while administration of the Highway Act is under the Administrator, Highway Transport Branch, Vancouver.

Yukon.—*Administration.*—Territorial Secretary, Dawson, Yukon. Information regarding regulations may also be obtained from the Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa. *Legislation.*—The Motor Vehicle Ordinance, No. 14, 1914, and amendments.

Section 2.—Roads and Vehicles.

The facilities for road transportation are dealt with in two subsections devoted, respectively, to roads and highways and to motor vehicles.

Subsection 1.—Roads and Highways.

Historical.—A brief description of the early colonization roads in Canada was given at p. 733 of the 1934-35 Year Book.

Recent Highway Development.—With the rapid increase in the percentage of motor-car owners to population (see pp. 663-664) the demand for improved roads has become more and more insistent since the War. Furthermore, the advantages to be gained by attracting touring motorists have been a powerful incentive to governing bodies to improve trunk roads and scenic highways within their jurisdictions. One sphere where the motor car has been of special economic advantage has been in rural areas, where its speed and economy are a great improvement over the old horse-drawn vehicle. As a result, in the Census of 1931 every second farm reported a farm-owned motor vehicle (1·96 farms per farm-owned motor vehicle). This widespread rural ownership of automobiles has in turn brought about an improvement of secondary rural roads.

The table of road mileages, p. 663, includes all roads under provincial jurisdiction and local roads in the Maritime Provinces and Ontario and estimates of local roads in the four western provinces. There are great stretches of country in the northern portions of Quebec, Ontario, the Prairie Provinces, and British Columbia with very few people and very few roads, but the southern portions are well supplied. The Trans-Canada Highway is now under construction, running from the Atlantic to the Pacific oceans entirely in Canadian territory.

Statistics of urban streets have been collected since 1935 from cities and principal towns; the small municipalities omitted would increase the totals very little. For 1937 the total number of miles of street reported was 11,411, composed of: 1,777 miles of sheet asphalt; 756 miles of portland cement concrete; 1,212 miles of bituminous macadam, concrete, and other bituminous surfaces; 534 miles of water-bound macadam; 2,508 miles of gravel and crushed stone; and 763 miles of other surfaces; making a total of 7,550 miles of surfaced streets and 3,861 miles of earth roads. These figures for urban streets or roads are not included in the table of highway mileage which follows.

1.—Classification of Highway Mileage, by Provinces, 1937.

NOTE.—The date for which the mileage was reported is indicated for each province. The figures for Canada are the sums of the mileages so reported. Urban streets are not included in the figures.

Classification.	P.E.I. Dec. 31, 1937.	N.S. Nov. 30, 1937.	N.B. Oct. 31, 1937.	Que. June 30, 1937.	Ont. Mar. 31, 1938.	Man. Apr. 30, 1938.	Sask. Apr. 30, 1938.	Alta. Dec. 31, 1937.	B.C. Mar. 31, 1937.	Total.
	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.	miles.
SURFACED ROAD.										
Sheet asphalt	[1]	5	[1]	[1]	230	6	[1]	[1]	71	312[2]
Portland cement concrete	4	[1]	[1]	179	1,914	11	[1]	[1]	46	2,154[2]
Bituminous concrete	63	585	501	757	1,187	132	[1]	[1]	[1]	3,225[2]
Bituminous macadam	[1]	55	13	185	456	96	5	2	11	812[2]
Bituminous mulch	[1]	14	24	[1]	66	[1]	139	4	343	247[2]
Bituminous spraycoat	[1]	[1]	[1]	712	1,059	87	[1]	292	765	3,269[2]
Retread	[1]	19	[1]	209	934	[1]	[1]	[1]	[1]	1,162[2]
Water-bound macadam	[1]	[1]	[1]	1,256	140	[1]	[1]	[1]	42	9,567[2]
Gravel, crushed stone	205	4,238	6,580	14,582	50,046	11,334	2,862	2,967	8,304[3]	92,989
Sand clay, stabilized gravel	[1]	[1]	[1]	[1]	58	[1]	6	[1]	[1]	64[2]
Wood or granite block, brick	[1]	[1]	[1]	[1]	4	[1]	[1]	[1]	[1]	4[2]
Other surface	5	[1]	[1]	[1]	[1]	[1]	[1]	67	155	227[2]
TOTALS, SURFACED ROAD	277[2]	4,916[2]	7,118[2]	17,880[2]	56,094[2]	11,666[2]	3,012[2]	3,332[2]	9,737[2]	114,032[2]
EARTH ROAD.										
Improved earth	2,215	3,929	2,320	17,121	20,024	4,724	148,482	86,800	10,665	296,280
Unimproved earth	1,158	6,116	2,176	[1]	417	74,713	61,410	[1]	2,738	148,728[2]
TOTALS, EARTH ROAD	3,373	10,045	4,496	17,121[2]	20,441	79,437	209,892	86,800[2]	13,403	445,008[2]
Grand Totals	**3,650**[2]	**14,961**[2]	**11,614**[2]	**35,001**[2]	**76,535**[2]	**91,103**[2]	**212,904**[2]	**90,132**[2]	**23,140**[2]	**559,040**[2]

[1] None reported. [2] Incomplete, see footnote 1. [3] Includes some water-bound macadam.

Subsection 2.—Motor Vehicles.

Registration.—The increase in the use of motor vehicles in Canada has been very rapid; this is shown by the statistics of Table 2. In Table 3 the numbers of motor vehicles registered in 1936 and 1937 are given by provinces, classified as passenger cars, commercial cars or trucks, motor buses, and motor cycles.

The average population per vehicle registered was 8·4 in 1937. Canada ranked fourth in this respect, the United States being first with 4·3. On the basis of the total registration of 1,319,702, only four countries had larger numbers in 1937, *viz.*, United States, United Kingdom, France, and Germany.

2.—Numbers of Motor Vehicles Registered in Canada, by Provinces, calendar years 1929-37.

NOTE.—Registrations given here include passenger cars, trucks, buses, motor cycles, service cars, etc., but not trailers or dealer licences. Figures for the years 1904-28 are given at p. 668 of the 1937 Year Book.

Year.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.[1]
1929	6,116	39,972	31,736	169,105	540,207	77,259	128,426	98,720	95,571	1,187,331
1930	7,376	43,029	34,699	178,548	562,506	78,850	127,193	101,119	98,938	1,232,489
1931	7,744	43,758	33,627	177,485	562,216	75,210	107,830	94,642	97,932	1,200,668
1932	6,982	41,013	28,041	165,730	531,597	70,840	91,275	86,781	91,042	1,113,533
1933	6,940	40,648	26,867	160,012	520,353	68,590	84,944	86,041	88,554	1,083,178
1934	7,206	41,932	29,094	165,526	542,245	70,430	91,461	89,369	92,021	1,129,532
1935	8,231	43,952	31,217	170,644	564,076	70,660	94,792	93,870	98,411	1,176,116
1936	7,632	46,179	33,402	181,628	590,226	74,940	102,270	97,468	106,079	1,240,124
1937	8,011	50,048	36,780	197,917	623,918	80,860	105,064	100,434	116,341	1,319,702

[1] Includes registrations in Yukon.

3.—Types of Motor Vehicles Registered in Canada, by Provinces, calendar years 1936 and 1937.

Province.	Passenger Cars.[1]	Commercial Cars or Trucks.[2]	Motor Buses.	Motor Cycles.	Total.
	No.	No.	No.	No.	No.
1936.					
Prince Edward Island	6,746	852	13	21	7,632
Nova Scotia	37,478	8,338	67	296	46,179
New Brunswick	27,731	5,407	88	176	33,402
Quebec	148,374	30,193	563	2,498	181,628
Ontario	514,211	70,693	769	4,553	590,226
Manitoba	61,730	12,380	170	660	74,940
Saskatchewan	81,519	20,220	87	444	102,270
Alberta	79,538	17,310	91	529	97,468
British Columbia	84,062	20,078	304	1,635	106,079
Yukon	140	145	2	13	300
Totals, 1936	**1,041,529**	**185,616**	**2,154**	**10,825**	**1,240,124**
1937.					
Prince Edward Island	6,993	992	5	21	8,011
Nova Scotia	39,900	9,773	72	303	50,048
New Brunswick	29,937	6,577	92	174	36,780
Quebec	161,317	33,429	645	2,526	197,917
Ontario	541,802	76,714	820	4,582	623,918
Manitoba	65,747	14,300	173	640	80,860
Saskatchewan	83,905	20,597	75	487	105,064
Alberta	81,713	18,080	94	547	100,434
British Columbia	91,549	22,639	340	1,813	116,341
Yukon	149	167	4	9	329
Totals, 1937	**1,103,012**	**203,268**	**2,320**	**11,102**	**1,319,702**

[1] Includes taxicabs. [2] Includes tractors, road machines, flushers, municipal fire engines, etc.

Apparent Consumption of Automobiles in Canada.—The apparent consumption of automobiles in Canada in any year may be computed by deducting the number exported from the sum of the production and imports. Prior to 1925 the figures of apparent consumption do not show a pronounced trend but between 1925 and 1929 they increased substantially. From 1929 to 1932 the decrease was rapid and continuous but was practically halted in 1933, in which year production showed some improvement but mainly on account of the export demand. In 1937 the apparent consumption showed an increase of 39 p.c. over the figure for 1936. Statistics regarding retail sales and sales financing of motor vehicles in Canada appear at pp. 614-617 of this volume.

4.—Apparent Consumption of Automobiles in Canada, 1926-37.

NOTE.—Figures for the years 1917-25 will be found at p. 673 of the 1938 Year Book.

Year.	Production.	Imports.	Total Supply.	Exports.	Re-Exports.	Total Exports.	Apparent Consumption.
	No.	No.	No.	No.	No.	No.	No.
1926	204,727	28,544	233,271	74,324	370	74,694	158,577
1927	179,054	36,630	215,684	57,414	438	57,852	157,832
1928	242,054	47,408	289,462	79,388	467	79,855	209,607
1929	262,625	44,724	307,349	101,711	671	102,382	204,967
1930	153,372	23,233	176,605	44,553	818	45,371	131,234
1931	82,559	8,738	91,297	13,813	726	14,539	76,758
1932	60,789	1,449	62,238	12,534	488	13,022	49,216
1933	65,852	1,781	67,633	20,403	497	20,900	46,733
1934	116,852	2,905	119,757	43,368	399	43,767	75,990
1935	172,877	4,111	176,988	64,330	291	64,621	112,367
1936	162,159	9,903	172,062	55,570	267	55,837	116,225
1937	207,463	20,069	227,532	65,867	276	66,143	161,389

Section 3.—Finances of Road Transportation.

The cost of road transportation to the people of Canada might be summarized under the following headings: expenditures on roads and highways; expenditures of individuals and corporations upon owned motor vehicles; and expenditures for freight and passenger services rendered by motor-vehicle public carriers such as taxi, bus, and motor transport companies. Since expenditures on roads and highways are made almost entirely by governmental bodies, fairly complete statistics are available regarding them, but, owing to the tremendous number of individuals and organizations which would have to be canvassed and the difficulties involved, complete statistics are not available under the other two headings.

An estimate may be made of the value of motor vehicles in use. Vehicles registered in 1937 numbered 1,319,702 (Table 2, p. 663). Vehicles estimated as purchased in 1937 numbered 413,043, valued at $245,278,000. Used cars included in these purchases had an average value of $323. Subtracting purchases in 1937 from total registrations in 1937, there remained 905,659 cars purchased by their owners in previous years, which, at an estimated average value of $200, would be worth $181,000,000, giving a total value of $426,000,000 for all motor vehicles registered in 1937.

The annual expenditure for the purchase of new motor vehicles is given for the year 1930 and since 1932 in the chapter on Internal Trade at p. 615. Unfortunately, this series as yet covers only a few years, several of which were years of depression, so that its significance will increase with a longer and more representative period. The retail value of new cars sold in 1932 was $45,261,000, while in 1937 it had risen to $149,170,527. The average for the seven years, 1930 and 1932-37, was $95,094,000.

Some indication of the annual expenditures for the servicing of motor vehicles may be obtained from the statistics of retail merchandising appearing on pp. 610-611. Sales of gasoline are given on p. 670. No statistics are available regarding the earnings of motor transport and bus companies.

Expenditures on Roads and Highways.—Roads in Canada, except in the Territories and the National Parks are under the jurisdiction of provincial and municipal authorities. The Dominion Bureau of Statistics has just completed a compilation of expenditures on highways, bridges, ferries, and foot paths, for the period 1919-37. This compilation includes expenditures by the Dominion on roads, bridges, etc., in National Parks, and on unemployment road projects, by the provinces, and by rural municipalities in Ontario, and covers the bulk of the expenditures on rural roads and on bridges and ferries, which are links in the road systems. The mileage of improved highways prior to 1919 was relatively small, the present extensive provincial highway systems having been almost entirely developed since the War to meet the requirements of motor traffic. Prior to 1919 roads were under the jurisdiction and maintenance of the municipalities in which they lay. However, the old gravel and water-bound macadam roads formed foundations in many places for new concrete and bituminous surfaces applied later.

The total expenditures during these nineteen years by these authorities were: for construction $780,571,155, and for maintenance $326,401,275, expenditures for plant and general items being divided between construction and maintenance on a *pro rata* basis, where not allocated by the authorities.

The details of these expenditures are shown in Table 5. In addition to the Dominion expenditures shown as such, subsidies were granted to the provinces, $20,000,000 under the Canada Highways Act, 1919, and $42,526,662 under unemployment Acts, 1930 to 1937, including $19,145,258 for the Trans-Canada Highway. The table does not include expenditures by urban municipalities on streets and sidewalks, which have been collected only since 1935, and for the three years 1935-37 amounted to $34,351,382 for construction and maintenance. The expenditures on these streets during the year 1937 amounted to $3,881,344 for construction and $8,333,779 for maintenance. Of the total of $12,215,123, the sum of $9,210,050 was expended on roads, $1,032,697 on bridges and ferries, and $1,546,605 on sidewalks and footpaths.

5.—Summary of Highway Expenditures in Canada, 1919-37.

Province and Item.	Roads.		Bridges and Ferries.		Totals, Expenditures.		
	Construction.	Maintenance.	Construction.	Maintenance.	Construction.	Maintenance.	Total.
	$	$	$	$	$	$	$
Prince Edward Island—							
Totals	[1]	[1]	6,488[2]	[1]	6,448[2]	[1]	6,448[2]
Provincial	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Dominion	Nil	Nil	6,488	Nil	6,488	Nil	6,488
Nova Scotia—							
Totals	52,425,973	25,147,053	3,017,153	3,602,071	55,443,126	28,749,124	84,910,696[3]
Provincial	52,259,341	25,147,053	3,000,046	3,600,818	55,259,387	28,747,871	84,725,704[3]
Dominion	166,632	Nil	17,107	1,253	183,739	1,253	184,992
New Brunswick—							
Totals	47,935,401	12,915,983	8,532,624	5,765,730	56,468,025	18,681,713	75,149,738
Provincial	47,925,069	12,915,983	8,246,031	5,719,888	56,171,100	18,635,871	74,806,971
Dominion	10,332	Nil	286,593	45,842	296,925	45,842	342,767
Quebec—							
Totals	112,007,599	59,958,180	15,719,665	1,299,682	127,727,264	61,257,862	188,985,126
Provincial	112,007,599	59,958,180	15,412,778	1,107,155	127,420,377	61,065,335	188,485,712
Dominion	Nil	Nil	306,887	192,527	306,887	192,527	499,414
Ontario—							
Totals	358,142,455	137,087,930	20,312,234	1,687,274	378,454,689	138,775,204	517,229,893
Provincial	245,842,976	58,163,887	19,722,962	1,366,746	265,565,938	59,530,633	325,096,571
Dominion	8,163	26,343	589,272	320,528	597,435	346,871	944,306
Municipal	112,291,316	78,897,700	Nil	Nil	112,291,316	78,897,700	191,189,016
Manitoba—							
Totals	18,011,002	7,068,562	1,253,286	129,983	19,264,288	7,198,545	26,462,833
Provincial	17,506,856	6,998,102	961,959	120,109	18,468,815	7,118,211	25,587,026
Dominion	504,146	70,460	291,327	9,874	795,473	80,334	875,807
Saskatchewan—							
Totals	43,312,860	8,375,435	5,334,893	2,841,298	48,647,753	11,216,733	59,864,486
Provincial	42,859,829	8,224,819	4,687,398	2,839,291	47,547,227	11,064,110	58,611,337
Dominion	453,031	150,616	647,495	2,007	1,100,526	152,623	1,253,149
Alberta—							
Totals	28,243,536	15,637,142	8,232,885	2,541,288	36,476,421	18,178,430	54,654,851
Provincial	23,909,435	13,655,071	7,981,572	2,521,544	31,891,007	16,176,615	48,067,622
Dominion	4,334,101	1,982,071	251,313	19,744	4,585,414	2,001,815	6,587,229
British Columbia—							
Totals	47,848,128	30,806,909	10,190,428	11,535,799	58,038,556	42,342,708	100,381,264
Provincial	38,331,205	29,936,951	9,919,167	11,530,064	48,250,372	41,467,015	89,717,387
Dominion	9,516,923	869,958	271,261	5,735	9,788,184	875,693	10,663,877
Northwest Territories—							
Dominion	Nil	Nil	44,545	956	44,545	956	45,501
Canada—							
Totals	**707,926,954[2]**	**296,997,194[2]**	**72,644,201[2]**	**29,404,081[2]**	**780,571,155[2]**	**326,401,275[2]**	**1,107,690,876[2,3]**
Provincial	**580,642,310[2]**	**215,000,046[2]**	**69,931,913[2]**	**28,805,615[2]**	**650,574,223[2]**	**243,805,661[2]**	**895,098,330[2,3]**
Dominion	**14,993,328**	**3,099,448**	**2,712,288**	**598,466**	**17,705,616**	**3,697,914**	**21,403,530**
Municipal	**112,291,316**	**78,897,700**	**Nil**	**Nil**	**112,291,316**	**78,897,700**	**191,189,016**

---

[1] Not reported. [2] Not including provincial expenditures for P.E.I., which were not reported.
[3] Includes $718,446 provincial operating expenses of bridges and ferries in Nova Scotia.

The foregoing table summarizes expenditures on roads for the whole period 1919-37, while Table 6 shows such expenditures during individual recent years. Provincial expenditures included here under 1937, for example, are those for their respective fiscal years, which ended on the dates indicated in Table **1**, p. 663.

6.—Capital, Maintenance, and General Expenditures on Provincial Highways or Provincially Subsidized Highways in Canada, calendar years 1933-37.

Province.	1933.	1934.	1935.	1936.	1937.
CAPITAL EXPENDITURES.					
	$	$	$	$	$
Prince Edward Island	68,254	226,863	998,067	[1]	399,643
Nova Scotia	2,865,306	1,293,410	5,133,188	6,587,411	7,852,858
New Brunswick	761,056	1,226,990	3,780,587	5,732,915	10,142,464
Quebec	8,587,085	6,555,148	6,466,134	8,033,000	5,906,126
Ontario	10,270,065	34,339,626	20,769,357	8,965,720	36,582,390
Manitoba	102,707	215,965	150,724	2,991	94,723
Saskatchewan	225,860	1,054,220	468,623	1,506,231	2,275,589
Alberta	235,541	1,106,891	2,052,858	1,399,544	1,638,236
British Columbia	738,705	125,182	2,619,022	2,739,104[2]	4,573,125
Totals	**23,854,579**	**46,144,295**	**42,438,560**	**34,966,916**[3]	**69,465,154**
MAINTENANCE EXPENDITURES.					
	$	$	$	$	$
Prince Edward Island	270,505	315,476	443,542	[1]	289,088
Nova Scotia	1,894,967	1,804,066	1,734,352	1,893,637	1,839,592
New Brunswick	742,394	925,082	1,390,057	714,445	1,131,365
Quebec	3,388,343	3,571,805	3,921,273	5,022,914	4,700,740
Ontario	5,729,138	7,901,232	7,565,899	5,836,251	9,503,604
Manitoba	397,317	483,806	452,040	420,551	520,629
Saskatchewan	1,361,721	1,556,862	1,208,051	1,079,306	830,749
Alberta	780,533	798,586	1,164,032	1,154,391	1,314,907
British Columbia	2,085,557	1,657,673	3,837,524	4,013,475[2]	2,299,532
Totals	**16,650,475**	**19,014,588**	**21,716,770**	**20,134,970**[3]	**22,430,206**
PLANT AND GENERAL EXPENDITURES.					
		$	$	$	$
Prince Edward Island		18,851	31,095	[1]	36,884
Nova Scotia		50,699	Nil	5,000	160,106
New Brunswick		100,238	"	Nil	72,643
Quebec		675,383	1,401,587	1,679,603	920,795
Ontario		706,441	866,459	360,529	1,487,196
Manitoba		21,914	88,130	88,130	107,357
Saskatchewan		138,108	135,056	77,234	98,298
Alberta		17,500	40,938	26,747	33,441
British Columbia		138,243	184,393	192,849[2]	208,732
Totals		**1,867,377**	**2,747,658**	**2,430,092**[3]	**3,125,452**
DOMINION-PROVINCIAL DISTRIBUTION OF ALL EXPENDITURES.					
	$	$	$	$	$
Dominion—net expenditures and subsidies	3,698,705	9,824,691	10,092,310	5,229,410	5,055,445
Provincial—net expenditures and subsidies	31,553,347	43,556,087	51,066,944	48,877,721	85,127,756
Municipal—net expenditures and subsidies	5,253,002	11,778,105	5,743,734	3,424,847	4,837,611

[1] No report.

[2] Total expenditures divided between construction, maintenance, and general on 1935 basis.

[3] Does not include Prince Edward Island.

Provincial Funded Debt Incurred for Highways.—By far the greater portion of the highway expenditures has been made by the provinces and consequently must be paid out of provincial taxes. Payment for much of the construction costs has been deferred and this has accounted for part of the rapid increase in provincial funded debt since 1919. In 1919 the net funded debt of all the provinces was $290,748,592; by 1937 it had increased to $1,568,046,003 (see Table **35**, p. 917) and the portion chargeable to highways was $569,719,611 or almost double the net debt for all purposes in 1919. As already explained on p. 662, the provincial systems of modern motor roads have been almost entirely a post-War development and prior to 1919, there were practically no provincial expenditures on highways.

Table **7** shows the highway debt of the provinces outstanding at the ends of their respective fiscal years approximating the calendar years 1935-37, and the annual payments thereon during the same three years.

7.—Provincial Government Funded Highway Debt and Annual Charges Thereon, 1935-37.

NOTE.—Provincial Governments report for their fiscal years ended at various dates. For these dates in the latest year, see Table 1, p. 663.

Province.	Highway Debt Outstanding.			Annual Interest and Sinking Fund Payments.				
	1935.	1936.	1937.	1935.	1936.	1937.		
				Total.	Total.	Interest.	Sinking Fund.	Total.
	$	$	$	$	$	$	$	$
P.E. Island......	1,004,774[1]	1,004,774[1]	767,636	86,000[1]	86,000[1]	37,357	194,468	231,825
Nova Scotia......	30,496,495	33,980,000	49,674,625	1,215,396	1,348,625	1,801,198	138,135	1,939,333
New Brunswick	45,474,355	47,612,809	49,979,092	1,845,855	1,782,787	2,184,086	249,895	2,433,981
Quebec.........	70,811,283	70,811,283	80,736,741	5,101,607	4,514,084	2,880,030	1,610,520	4,490,550
Ontario........	217,075,787	224,639,350	258,770,555	10,853,789	13,630,543	12,938,528	[2]	12,938,528
Manitoba.......	17,794,182	17,794,182	17,794,182	893,293	884,795	847,651	90,604	938,255
Saskatchewan..	33,630,938	33,799,488	33,673,494	1,505,169	1,600,936	1,561,190	69,420	1,630,610
Alberta........	35,861,450	37,025,514	37,025,514	2,039,309	1,150,514	1,062,155[3]	[2]	1,062,155
British Columbia....	40,141,070	41,297,772	41,297,772	2,047,043	3,378,548	1,762,080	1,616,468	3,378,548
Totals.....	**492,290,334**	**507,965,172**	**569,719,611**	**25,587,461**	**28,376,832**	**25,074,275**	**3,969,510[4]**	**29,043,785**

[1] 1934 data. [2] Not reported. [3] Proportion of total charges paid only. [4] Less Ontario and Alberta; see footnote 2.

Provincial Government Revenue.—The taxation of motor vehicles, garages, chauffeurs, etc., is becoming a lucrative source of Provincial Government income. In every province the following licences or permits, duly issued by the provincial authorities, are required: motor vehicles of all kinds, trailers (in all provinces except Alberta), operators or drivers, paid chauffeurs, dealers, garages, and gasoline and service stations. A sales tax on gasoline is also levied by each province. The following table shows the provincial revenue for the years 1936 and 1937, indicating, at the same time, the more important sources from which it is derived. Dominion Government revenues from import duties, excise, and sales taxes are not included.

8.—Provincial Revenues from the Taxation of the Distribution and Operation of Motor Vehicles, calendar years 1936 and 1937.

NOTE.—See the headnote to Table 7.

Province.	Passenger Cars.	Trucks.	Motor Cycles.	Dealer Licences.	Operators and Chauffeurs.	Mileage Tax on Motor Buses and Trucks.	Gasoline Tax.	Total, including Miscellaneous Revenue.
	$	$	$	$	$	$	$	$
1936.								
P.E. Island	88,877	16,345	111	490	3,978	235	200,854	312,980
Nova Scotia	717,610	362,159	1,862	4,139	101,818	782	1,760,209	3,008,827
New Brunswick	490,952	289,281	[1]	4,330	95,783	3,002	1,149,129	2,046,628
Quebec	3,037,397	1,718,644	9,492	31,855	996,495	93,270	6,272,064	12,312,957
Ontario	6,258,979	2,988,552	13,681	34,348	924,004	270,785	16,049,857	27,194,813
Manitoba	624,000	154,600	2,700	[1]	102,400	43,330	2,051,200	3,024,030
Saskatchewan	1,059,180	240,216	[1]	15,592	63,760	94,097	1,951,834	3,521,871
Alberta	1,040,747	498,852	2,104	17,526	136,858	276,952	2,380,088	4,380,004
British Columbia	1,636,110	536,165	8,854	13,742	177,033	77,239	2,717,201	5,221,059
Yukon	1,370	1,460	39	[2]	[2]	[2]	[2]	3,189
Totals, 1936	**14,955,222**	**6,806,274**	**38,843**[3]	**122,022**[3]	**2,602,129**	**859,692**	**34,532,436**	**61,026,358**
1937.								
P.E. Island	101,352	34,589	116	620	4,443	529	269,232	414,122
Nova Scotia	776,029	425,243	1,789	7,511	112,406	370	2,006,489	3,419,530
New Brunswick	525,554	391,297	[1]	3,843	105,804	5,294	1,439,096	2,515,366
Quebec	3,189,079	1,750,040	9,600	31,186	1,124,140	110,713	7,078,230	13,673,199
Ontario	4,293,833	2,640,876	9,744	26,231	949,251	423,553	17,644,164	26,687,702
Manitoba	632,390	184,440	2,680	[1]	111,700	111,977	2,270,660	3,383,797
Saskatchewan	1,103,440	258,140	[1]	19,034	70,638	114,515	1,937,553	3,605,107
Alberta	1,304,092	440,939	2,739	24,417	150,718	204,619	2,610,211	4,799,366
British Columbia	1,819,669	629,881	10,053	16,445	200,953	1,599	3,118,312	5,866,275
Yukon	1,589	1,373	36	[2]	[2]	[2]	[2]	3,388
Totals, 1937	**13,747,027**	**6,756,818**	**36,757**[3]	**129,287**[3]	**2,830,053**	**973,169**	**38,373,947**	**64,367,852**

[1] Included with "Miscellaneous". [2] Tax not applicable. [3] Incomplete figure, see footnote 1.

Section 4.—Road Traffic.

Up to the present the motor vehicle has affected passenger traffic more than freight traffic of the steam and electric railways. This diversion of passenger traffic has been effected largely by the private automobile, although the motor bus is rapidly becoming more important and now operates between all large centres. The motor truck also carries a considerable amount of freight, although no statistics showing the tonnage handled are as yet available. The difficulties of collecting statistics from the very large number of unorganized operators concerned are obvious.

Widely differing opinions are held regarding the extent to which the motor vehicle has cut into railway traffic.* A definite conclusion cannot be reached until reliable statistics regarding motor vehicle traffic are available. While undoubtedly the passenger motor vehicle now carries a certain amount of passenger traffic which would otherwise be carried by steam or electric railways, the error should be avoided of considering all the passenger movement by motor vehicles as a loss to the railways. Much of that movement is due to the convenience and cheapness of motor vehicle travel and would not take place at all under less favourable circumstances.

---

* Counsel for the railways before the Transport Committee of the Senate of Canada in 1938 presented arguments showing a serious loss of revenue by the railways from motor vehicle competition. On the other hand, in *Automobile Facts and Figures, 1936*, published by the Automobile Manufacturers' Association, estimates of railway and motor traffic are given which, in the field of freight movement, rather minimize the seriousness of the motor truck competition, if conditions of motor traffic in Canada may be assumed to be similar to those of the United States.

Similar considerations apply also, though less importantly, to freight moved by motor trucks. Part of the short-haul truck traffic has displaced the horse-drawn vehicle rather than the railway. Furthermore, traffic diverted from the railways to motor vehicles has been offset to some extent by new traffic for the railways created by the automobile industry, consisting of raw and finished products of manufacture, motor fuel and oil, and materials for construction and maintenance of roads suitable for motor travel.

On the other hand a phase of this new competition with railway transportation has been its effect on freight rates. The railway rate structure took into consideration the value of the goods handled, *i.e.*, bulk and low-value commodities were carried at relatively low rates, while manufactured and high-class commodities were at higher rates, the difference in rates having little relation to the difference in costs of transportation. Such a structure allowed raw materials to be moved cheaply and the railways were compensated by higher rates on the finished commodities. The motor truck is changing this; the motor truck operator carries these high-class commodities at rates closer to actual costs and does not attempt to carry raw materials except in special cases. His costs are reduced by a right-of-way being supplied for which he pays only a part of the cost and, if his rates are much above the actual cost, the manufacturer can quite easily supply his own transportation. Some branch lines of the railways are practically deserted except for a short time each year when snow interferes with motor vehicle operation. Consequently, railway losses include both losses from freight diverted and also from reductions in rates for high-class freight in attempts to retain such traffic without compensating increases in low-class freight rates.

Gasoline Consumption.—All provinces require retail sales of gasoline to be reported and a tax is imposed on all gasoline consumed by motor vehicles using the highways and streets and also on that used for an increasing number of other purposes. The taxable gasoline is, however, still largely consumed by motor vehicles and indicates in a general way the increase or decrease in the use of motor vehicles. Net sales are the differences between the total or gross sales reported and the quantities on which the tax is refunded in whole or in part, or on which the tax is not imposed at the time of sale.

9.—Sales of Gasoline in Canada, by Provinces, calendar years 1933-37.

Province.	1933.	1934.	1935.	1936.	1937.
	gal.	gal.	gal.	gal.	gal.
Prince Edward Island	2,518,812	2,639,856	2,832,750	3,088,910	3,420,163
Nova Scotia	18,634,875	20,016,109	22,274,254	25,247,957	29,159,361
New Brunswick	12,574,097	13,640,325	15,185,003	17,477,029	21,947,202
Quebec	87,077,418	93,511,483	102,177,506	109,835,482	128,394,645
Ontario	228,415,717	252,976,407	272,680,687	282,827,724	324,858,959
Manitoba	24,895,531	27,694,263	28,482,662	30,581,967	34,635,432
Saskatchewan	31,837,173	36,784,519	39,166,282	45,966,233	46,278,251
Alberta	40,323,781	45,194,297	47,442,690	60,387,814	75,166,087
British Columbia	38,689,475	42,337,785	43,410,411	48,731,688	54,775,015
Totals, Gross Sales	**484,966,879**	**534,795,044**	**573,652,245**	**624,144,804**	**718,635,115**
Refunds	63,244,154	57,868,513	73,214,746	91,260,543	115,230,356
Totals, Net Sales	**421,722,725**	**476,926,531**	**500,437,499**	**532,884,261**	**603,404,759**

Motor Vehicle Accidents.—Motorists are required to report accidents but comprehensive statistics are not available for all provinces. The Vital Statistics Branch of the Bureau of Statistics compiles statistics on all deaths from motor vehicle accidents and these are shown in Table **10.** A direct comparison of such statistics between the provinces is of little value due to differences in size, population, motor vehicle density, etc., but, to put them on somewhat the same basis, the average number of deaths per 10,000 registered motor vehicles has also been tabulated. These data still give no weight to differences in use of motor vehicles, differences in climate, roads, tourist cars, etc., all of which are factors in accidents.

Table **11** shows the numbers of persons killed or injured in automobile accidents as reported by the motor vehicle branches of the Provincial Governments. It is quite possible that the latter reported some persons as injured who subsequently died from the injuries and these would be included in the fatalities of the vital statistics shown in Table **10**; also accidents that occurred late in December and resulted in deaths would be charged to December by the provincial authorities but to January of the next year in the vital statistics. Consequently, these data do not agree.

10.—Deaths Resulting from Motor Vehicle Accidents in Canada, by Provinces, calendar years 1926-37.

NOTE.—Statistics in this table are compiled by the Vital Statistics Branch, Dominion Bureau of Statistics.

Year.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
					NUMBERS OF DEATHS.					
1926	1	28	11	183	242	27	21	33	60	606
1927	2	31	25	252	387	32	24	35	77	865
1928	2	40	31	279	437	53	74	75	91	1,082
1929	1	61	47	323	556	68	56	71	117	1,300
1930	10	54	72	338	517	60	51	77	111	1,290
1931	5	49	45	355	574	60	50	67	111	1,316
1932	1	51	49	311	497	42	35	49	85	1,120
1933	2	47	22	256	416	38	32	64	78	955
1934	5	41	52	275	528	41	30	61	82	1,115
1935	2	57	40	314	571	53	40	45	102	1,224
1936	7	60	41	371	564	53	47	72	101	1,316
1937	7	88	67	405	774	66	47	55	124	1,633
					DEATHS PER 10,000 REGISTERED MOTOR VEHICLES.					
1926	2·89	10·82	5·11	16·89	6·23	4·67	2·16	5·03	8·82	7·23
1927	4·56	10·31	10·19	19·62	8·87	5·01	2·25	4·74	9·92	9·15
1928	3·68	11·39	11·00	18·79	8·90	7·45	6·08	8·40	10·25	10·05
1929	1·63	15·30	14·76	19·05	10·12	8·74	4·30	7·12	11·23	10·82
1930	13·51	12·54	20·67	18·89	9·16	7·57	3·93	7·50	11·22	10·40
1931	6·46	11·20	13·38	19·77	10·21	7·94	4·61	7·00	11·33	10·96
1932	1·43	12·39	17·47	18·77	9·35	5·87	3·83	5·64	9·34	10·05
1933	2·88	11·62	8·20	16·00	8·00	5·53	3·78	7·43	8·81	8·82
1934	6·94	9·78	17·87	16·62	9·74	5·82	3·28	6·83	8·91	9·82
1935	2·43	12·97	12·81	18·40	10·12	7·50	4·21	4·79	10·47	10·42
1936	9·17	12·99	12·27	20·43	9·56	7·07	4·60	7·39	9·52	10·61
1937	8·73	17·58	18·22	20·46	12·41	8·16	4·47	5·48	10·66	12·37

11.—Persons Killed or Injured in Motor Vehicle Accidents, as Reported by Provincial Motor Vehicle Authorities, showing Status of Person, 1937.

Item.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
Accidents.										
Fatal—										
Resulting in death of one or more persons	[1]	[1]	[1]	353	686	62	30	47	105	1,283[2]
Non-fatal—										
Resulting in injury to one or more persons	[1]	[1]	[1]	4,415	8,951	1,521	562	612	2,022	18,083[2]
Resulting in property damage only	[1]	[1]	[1]	4,211	4,269	798	608	4,038	3,149	17,073[2]
Totals, Accidents	[1]	**2,446**	**1,047**	**8,979**	**13,906**	**2,381**	**1,200**	**4,697**	**5,276**	**39,932[2]**
Persons Killed.										
Pedestrians	[1]	38	31	191	299	32	3	15	52	661[2]
Motor cyclists (drivers and passengers)	[1]	[1]	1	5	22	3	Nil	1	5	37[2]
Drivers of other motor vehicles	[1]	[1]	26	135	150	25	17	10	20	672[2]
Passengers and attendants of other motor vehicles	[1]	[1]			221		23	12	33	
Occupants of horse-drawn vehicles	[1]	[1]	1	10	9	3	Nil	1	2	26[2]
Pedal cyclists	[1]	2	4	35	65	2	2	1	10	121[2]
Others	[1]	[1]	Nil	Nil	Nil	1	Nil	8	Nil	9[2]
Totals, Persons Killed	[1]	**95[2]**	**63**	**376**	**766**	**66**	**45**	**48**	**122**	**1,581[2]**
Persons Injured.										
Pedestrians	[1]	289	137	2,417	3,696	579	125	230	656	8,129[2]
Motor cyclists (drivers and passengers)	[1]	[1]	2	146	251	41	15	17	116	588[2]
Drivers of other motor vehicles	[1]	[1]	353	2,440	2,273	761	237	132	492	12,937[2]
Passengers and attendants of other motor vehicles	[1]	[1]			4,484		407	234	1,124	
Occupants of horse-drawn vehicles	[1]	[1]	5	204	135	53	17	21	39	474[2]
Pedal cyclists	[1]	74	22	471	1,253	246	56	101	297	2,520[2]
Others	[1]	[1]	[1]	[1]	[1]	73	2	36	[1]	111[2]
Totals, Persons Injured	[1]	**1,307[2]**	**519**	**5,678**	**12,092**	**1,753**	**859**	**771**	**2,724**	**25,703[2]**

[1] Not reported. [2] Incomplete, see footnote 1.

PART IV.—WATERWAYS.*

Under this heading the statistics relating to shipping, aids to navigation, canals, and harbours are brought together because they are all essential and integral parts of the facilities for water-borne traffic; these facilities work together to promote the expeditious handling of the same freight without transhipment intervening. Under this form of treatment all the facilities for water-borne traffic are first presented, then the cost or other available financial statistics and, finally, figures which give some indication of the traffic handled. The general aim is to present a rounded picture of water transportation, rather than details of the activities of Government Departments dealing with certain phases of it.

---

* Information and statistics dealing with the indicated subject have been supplied as follows: aids to navigation, harbours, administrative services, and Government merchant marine, by the Department of Transport; graving docks and part of the financial statistics, by the Department of Public Works; Panama Canal, by the Governor of the Panama Canal Zone; other canal traffic, and statistics of shipping, by the Transportation and Public Utilities Branch, Dominion Bureau of Statistics.

The Canada Shipping Act.—Legislation regarding all phases of shipping was consolidated under the Canada Shipping Act (c. 44, 1934). The Act was a sequel to the passage of the Statute of Westminster in 1931, under which the Parliament of Canada accepted full responsibility for the regulation of Canadian shipping. The Canada Shipping Act was a comprehensive piece of legislation and constituted, in fact, the incorporation in the shipping law of Canada of features of international agreements and of British and previous Canadian legislation. A brief summary of the Act is given at pp. 681-683 of the 1938 Year Book.

Section 1.—Equipment and Facilities.

The developments and equipment to facilitate water traffic are classified under the sub-headings of shipping, aids to navigation and miscellaneous works, canals, and harbours. A subsection is added giving figures of administrative activities regarding the pilotage service, steamship inspection, personnel, and accidents to shipping.

Subsection 1.—Shipping.

Although a large part of the water-borne traffic, especially inland and coastwise, is carried in ships of Canadian registry, the commerce of the Dominion is by no means entirely dependent upon Canadian shipping since all waterways, including canals, and inland lakes and rivers, are open upon equal terms, except in the case of the coasting trade, to the shipping of all countries of the world.

Canadian Registry.—Statistics are given below showing the numbers and tonnages of vessels on the Registry of Shipping of Canada, and of vessels built in Canada and vessels sold to other countries. Under Part I of the Canada Shipping Act, every ship that falls under the definition of "British ship" given in Sec. 6 of the Act and is controlled, as to management and use, in Canada, must, unless registered elsewhere in the Empire, be registered in Canada. An exception is made in the case of ships not exceeding 10 tons register and engaged solely in coastal or inland navigation. A ship (whatever her qualification for British registry) which is not registered in any part of His Majesty's dominions, is not entitled to the privileges accorded to British ships. Vessels about to be built *may* be recorded, and vessels being built or equipped *must* be recorded, by a registrar of British ships under the Act. The procedure for the registration in Canada of British ships and the issuance of certificates is covered in Secs. 9-36. Secs. 64-70 govern the registry of alterations (or the registering anew if such be required) and lay down penalties for non-compliance with the requirements. The conditions governing transfer of registry are also laid down.

For a record of the number and tonnage of ships engaged in the carrying trade of Canada, see the tables under Section 3 (pp. 690-694) of this Part of the chapter. The tables are included there under traffic statistics because they relate more directly to traffic and services than merely to the shipping available. For an account of the shipping services operated by the Dominion Government, see p. 688.

1.—Numbers and Net Tonnages of Vessels on the Registry of Shipping of Canada, by Provinces, as at Dec. 31, 1928-37.

Note.—The figures in this table are supplied by the Department of Transport.

Province.	1928.		1929.		1930.		1931.		1932.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
P.E. Island......	132	8,549	134	8,370	130	8,351	129	10,996	134	11,124
Nova Scotia.....	1,436	126,428	1,471	127,077	1,478	119,055	1,434	112,891	1,400	113,352
New Brunswick..	828	33,395	885	34,031	919	38,350	983	39,766	983	39,293
Quebec...........	1,373	502,224	1,265	506,594	1,262	495,017	1,277	506,787	1,321	509,634
Ontario..........	1,746	367,007	1,759	365,531	1,775	392,708	1,771	378,925	1,761	422,336
Manitoba........	98	10,684	103	11,051	105	11,185	110	11,461	112	11,485
Saskatchewan....	6	486	6	486	6	486	6	486	6	486
British Columbia	3,012	313,651	3,257	335,810	3,203	361,328	3,178	361,305	3,161	362,407
Yukon...........	14	3,650	19	4,543	20	5,584	17	5,031	17	5,031
Totals.......	**8,645**	**1,366,074**	**8,899**	**1,393,493**	**8,898**	**1,432,061**	**8,905**	**1,427,648**	**8,895**	**1,475,148**

Province.	1933.		1934.		1935.		1936.		1937.	
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.
P.E. Island......	135	11,067	140	11,060	140	11,077	143	11,248	102	9,891
Nova Scotia.....	1,379	105,737	1,391	99,860	1,434	99,115	1,513	94,654	1,616	89,920
New Brunswick..	1,010	41,247	1,061	43,911	1,025	42,530	1,003	44,447	1,079	54,970
Quebec...........	1,320	482,579	1,291	463,591	1,312	460,313	1,393	457,229	1,255	444,956
Ontario..........	1,857	419,828	1,772	418,167	1,777	421,203	1,773	420,211	1,588	401,529
Manitoba........	113	11,505	114	11,943	87	8,157	131	8,169	83	7,726
Saskatchewan....	5	397	5	397	5	397	5	397	3	240
British Columbia	3,084	352,187	3,086	341,650	3,096	341,372	3,394	325,537	3,165	324,174
Yukon...........	17	5,031	17	5,074	18	5,179	18	5,179	19	5,317
Totals.......	**8,920**	**1,429,578**	**8,877**	**1,395,653**	**8,894**	**1,389,343**	**9,373**	**1,367,071**	**8,910**	**1,338,723**

2.—Vessels Built and Registered in Canada and Vessels Sold to Other Countries, fiscal years 1927-38.

Note.—For 1874-1900, see Canada Year Book, 1911, p. 383; for 1901-10, see 1932 Year Book, p. 597; and for the years 1911-26, see p. 718 of the 1936 Year Book. Statistics are from the Shipping Reports of the Department of National Revenue.

Fiscal Year.	Built.		Registered.		Sold to Other Countries.		
	No.	Tonnage.	No.	Tonnage.	No.	Tonnage.	Value.
							$
1927..............................	341	32,801	281	79,448	32	27,027	1,984,040
1928..............................	236	12,904	417	64,301	31	16,307	599,490
1929..............................	328	49,798	386	155,972	30	18,627	154,750
1930..............................	282	28,871	468	84,529	34	33,779	805,636
1931..............................	294	45,162	396	129,088	22	8,865	421,500
1932..............................	202	19,032	319	64,396	23	18,849	889,221
1933..............................	159	9,156	193	25,811	32	37,543	443,258
1934..............................	113	5,818	184	10,375	22	13,570	147,850
1935..............................	141	4,306	165	12,985	18	23,613	374,345
1936..............................	205	11,388	285	35,732	22	7,170	230,735
1937..............................	213	10,423	294	29,801	23	15,595	342,975
1938..............................	312	13,074	450	46,944	23	12,725	260,497

Subsection 2.—Aids to Navigation and Miscellaneous Works.

Included under this heading are the lighthouses and the whole system of marine danger signals on the east and west coasts of Canada, on Hudson bay and strait, the St. Lawrence river and gulf, the inland rivers and lakes and at the entrances to harbours—a very extensive system designed to provide safe navigation in all Canadian waters. In addition, a pilotage service is maintained in waters where navigation is difficult; this service is described under administrative services on p. 680. As a further aid to safe navigation, there are chains of radio signal and direction-finding stations which are described under that section of this chapter dealing with radiotelegraphy, on pp. 721-723.

3.—Marine Danger Signals Maintained in Canada, fiscal years 1927-38.

Note.—In addition to the aids to navigation listed, approximately 9,268 unlighted buoys, balises, dolphins, and beacons are maintained. The figures are supplied by the Department of Transport.

Description.	1927.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Lights	1,725	1,771	1,815	1,855	1,912	1,923	1,922	1,924	1,920	1,938	1,959	1,983
Lightships	11	11	11	11	11	11	11	11	12	12	11	10
Light-keepers	1,156	1,179	1,192	1,207	1,227	1,230	1,230	1,226	1,223	1,223	1,227	1,233
Fog whistles	8	6	8	8	8	8	8	8	8	8	8	8
Sirens	2	2	2	2	2	2	2	2	2	2	2	2
Diaphones	147	153	158	162	165	170	171	171	170	169	168	168
Fog bells	35	36	38	38	38	38	38	38	38	38	37	38
Hand fog horns	148	151	147	151	152	153	154	154	155	158	158	158
Hand fog bells	5	4	4	4	4	4	4	4	4	4	4	4
Gas, whistling, and bell buoys	380	401	411	425	429	436	444	440	438	441	445	460
Whistling buoys	36	38	40	40	40	42	42	41	41	41	41	39
Bell buoys	101	104	111	119	119	119	122	122	122	124	126	127
Submarine bells	6	6	4	4	4	3	2	2	2	2	2	2
Fog guns and bombs	6	6	5	5	5	5	5	5	4	6	9	12
Fog alarm stations only	13	13	13	13	13	13	13	13	13	13	13	13

A great deal has been done to improve navigable waters by dredging in channels and harbours, by the removal of obstructions, and by the building of remedial works to maintain or control water levels. Probably the largest task of this nature has been the St. Lawrence River Ship channel. An extensive floating plant is in service to maintain and improve the deep-water channel from Montreal to the sea for ocean-going shipping. Incidental to these developments of navigable waters are works to guard shore lines and prevent erosion, and also the control of roads and bridges which cross navigable channels. In order to prolong the season of navigation in important waters which freeze over in winter, ice-breaking operations are carried on at both the beginning and end of winter. This is particularly the case in connection with sea-going shipping from Montreal.

4.—Duration of the Season of Open Navigation in the St. Lawrence Ship Channel, calendar years 1911-38.

Note.—For the years 1882-1910, see Canada Year Book 1934-35, p. 756.

Calendar Year.	Channel Open, Quebec to Montreal.[1]	First Arrival from Sea, Montreal Harbour.	Last Departure for Sea, Montreal Harbour.	Calendar Year.	Channel Open, Quebec to Montreal.[1]	First Arrival from Sea, Montreal Harbour.	Last Departure for Sea, Montreal Harbour.
1911..........	Apr. 25	Apr. 26	Dec. 3	1926.........	May 1	May 3	Dec. 6
1912..........	" 29	" 30	" 3	1927.........	Apr. 11	Apr. 12	" 6
1913..........	" 14	" 19	Nov. 29	1928.........	" 26	" 26	" 9
1914..........	" 25	" 29	Dec. 4	1929.........	" 10	" 20	" 7
1915..........	" 14	" 30	" 11	1930.........	" 12	" 21	" 12
1916..........	" 22	May 1	" 3	1931.........	Mar. 19	" 15	" 11
1917..........	" 22	" 1	" 7	1932.........	" 27	" 14	" 8
1918..........	" 22	" 7	" 14	1933.........	" 23	" 14	" 6
1919..........	" 16	Apr. 22	" 10	1934.........	" 28	" 26	" 8
1920..........	" 18	" 25	" 7	1935.........	" 30	" 15	" 9
1921..........	Mar. 29	" 21	" 8	1936.........	" 28	" 13	" 11
1922..........	Apr. 13	" 24	" 2	1937.........	Apr. 9	" 19	" 8
1923..........	" 29	May 3	" 2	1938.........	" 12	" 18	" 4
1924..........	" 17	Apr. 24	" 3				
1925..........	Apr. 10	Apr. 22	Dec. 9				

[1] "Channel Open" means it can be navigated although there may be floating ice still in the river.

Subsection 3.—Canals.

Before the period of extensive railway construction which commenced for Canada in the 1850's, the water routes, more especially the St. Lawrence, the Great Lakes, and the Ottawa, were the chief avenues of transportation. These routes were interrupted at certain points, necessitating portages, and to eliminate the toil of unloading, transporting, and reloading at the portages the canals of Canada were constructed.

The earliest mention of canals in Canada is in connection with the Lachine canal, begun by early French settlers in 1700. Only after the conquest of Canada by the British, however, were improvements of the main water routes made. In the early part of the 19th century increased internal and foreign trade and the introduction of steam navigation resulted in more attention being given to this work. Although some of the early canals were constructed primarily for military purposes, they soon became essential to the commercial life of the country. However, since the development of railways in Canada, and even more since the growth of motor vehicle traffic, the canals, with the exception of those on the Great Lakes and St. Lawrence river, are playing a minor part in the transportation activities of the country.

There are in Canada six canal systems, under the control of the Dominion Department of Transport, which are connected with the Atlantic ocean by navigable routes, in addition to a number of other minor locks and canals, under the control of the Dominion Department of Public Works or other authority, to facilitate local navigation on disconnected lakes and rivers. The six main systems consist of the canals: (1) between Port Arthur or Fort William and Montreal; (2) from Montreal to the International Boundary near lake Champlain; (3) from Montreal to Ottawa; (4) from Ottawa to Kingston and Perth; (5) from Trenton, lake Ontario, to lake Huron (not completed); and (6) from the Atlantic ocean to Bras d'Or lakes, Cape Breton. By means of these canals, total waterways of 1,890 miles have been opened to navigation, the actual mileage of canals being 508·67.

A detailed description of the individual canals is given on pp. 626-629 of the 1926 Year Book. Summary statistics of their length and lock dimensions are given in Table **5**.

5.—Canals of Canada Under the Control of the Department of Transport, Length and Lock Dimensions, 1939.

Name.	Location.	Length of Canal.	Locks.			
			No.	Minimum Dimensions. Length.	Width.	Depth.
		miles.		ft.	ft.	ft.
St. Lawrence—						
Lachine	Montreal to Lachine	8·74	5	270	45	14[1]
Soulanges	Cascades Point to Coteau Landing	14·67	5	280	46	15[1]
Cornwall	Cornwall to Dickinson's Landing	11·00	6	270	43·67	14[1]
Farran's	Farran's Point rapids	1·28	1	800	50	16[1]
Rapide Plat	Rapide Plat to Morrisburg	3·89	2	270	45	14[1]
Galops	Iroquois to Cardinal	7·36	3	270	45	14[1]
Welland Ship	Port Weller, lake Ontario, to Port Colborne, lake Erie	27·60	8	859	80	30[2]
Sault Ste. Marie	St. Mary's rapids, 47 miles west of lake Huron	1·38	1	900	60	18·25[1]
Richelieu River—						
St. Ours lock	St. Ours, Que	0·12	1	339	45	12[1]
Chambly	Chambly to St. Johns, Que	11·78	9	120·5	23·25	6·5
Ottawa and Rideau Rivers—						
Ste. Anne lock	Junction of St. Lawrence and Ottawa rivers	0·12	1	200	45	9
Carillon	Carillon rapids, Ottawa river	0·94	2	200	45	9
Grenville	Long Sault rapids, Ottawa river	5·94	5	200	45	9·5
Rideau	Ottawa to Kingston	126·25	47	134	33	5
	Rideau lake to Perth (Tay branch)	6·50	2	134	33	5
Miscellaneous—						
Trent	Trenton to Peterborough lock, Peterborough	88·74	18	175	33	6
	Peterborough lock to Swift rapids	135·71	24	134	33	6
	Swift rapids to Port Severn	16·00[3]	(marine railways)			4
	Port Severn lock	–	1	100	25	6
	Sturgeon lake to Lindsay (Scugog branch)	8·35	1	142	33	6
	Lindsay to Port Perry (Scugog branch)	26·65[3]	Nil	–	–	–
Murray	Isthmus of Murray—bay of Quinte.	5·15[4]	"	–	–	–
St. Peters	St. Peters bay to Bras d'Or lakes, Cape Breton, N.S.	0·50	1	300	48	18[5]
St. Andrews lock[6]	Red river north of Winnipeg	–	1	215	45	17

[1] Navigable depths are occasionally less at times of extremely low water. [2] Minimum depth between locks 25 ft. [3] Minimum depth of navigable channels is 4·5 ft. [4] Minimum depth of canal with lake Ontario at elevation 244 feet above sea-level is 11 ft. [5] The depth of canal prism is 17 ft. [5] Under the control of the Department of Public Works.

Subsection 4.—Harbours.

Water transportation cannot be studied with any degree of completeness without taking into consideration the co-ordination of land and water transportation at many of the seaboard and inland ports. Much equipment designed to facilitate interchange movements is provided by the harbours. This harbour equipment includes the necessary docks and wharves, some for passenger traffic but most of them for freight, warehouses for the handling of general cargo, and special equipment for such bulk freight as lumber, coal, oil, grain, etc. Equipment may include cold storage, harbour railway and switching connections, grain elevators, coal bunkers, oil storage tanks, and, in the main harbours, dry-dock accommodation.

Eight of the principal harbours of Canada are under the administration of the National Harbours Board, as explained below. Seven other harbours are administered by commissions which include municipal as well as Dominion Government appointees, while the remainder are administered by harbour masters directly under the authority of the Department of Transport.

In addition to the harbour facilities owned by the National Harbours Board or other operating commission, at most ports there are dock and handling facilities owned by private companies such as railways, pulp and paper, oil, and sugar industries, etc. At a number of ports there are also graving docks which are dealt with separately below.

National Harbours Board.—Prior to October, 1935, the seven national harbours of Canada—Halifax, Saint John, Chicoutimi, Quebec, Three Rivers, Montreal, and Vancouver—were under the management and control of separate Harbour Commissions, each consisting of three persons appointed from the immediate locality. Orders in Council were passed on Oct. 31, 1935, accepting the resignation of the individual Harbour Commissions, and other Orders in Council passed, as of the same date, vesting in a single Board of three Harbour Commissioners the powers and responsibilities inherent in each of the seven former commissions. In this way effect was given to the more important recommendations of Sir Alexander Gibb, following his survey of national harbours in 1931.

During the 1936 session of Parliament, the individual Acts relating to the administration of these harbours were repealed and a single uniform Act (c. 42) substituted, placing the general direction and control of the national harbours referred to under the National Harbours Board, leaving the local administration in the hands of a port manager responsible to the Board. This legislation became effective on Oct. 1, 1936. An Order in Council was passed Feb. 27, 1937, transferring Churchill harbour (including the grain elevator) as well as grain elevators at Prescott and Port Colborne, to the National Harbours Board for administration, management, and control.

In pursuance of the legislation referred to, the National Harbours Board, with headquarters at Ottawa, is responsible, under the Minister of Transport, for the administration of the harbours and grain elevators referred to above. Engineering works in the several harbours are carried on under the direct control of the Chief Engineer of the Board assisted by an engineering staff at headquarters and engineers on the works. The Board has local representatives at various harbours with title of port manager or superintendent. Accounting for each harbour is carried out by Treasury officers under the direction of the Comptroller of the Treasury and earnings at any harbour cannot be diverted for use elsewhere. All revenues and expenditures are subject to audit by the Auditor General of Canada.

In the statement below, a summary in tabular form is given of the most important facilities for the expeditious handling of cargo at six of the principal ports of Canada which are under the control of the National Harbours Board. The facilities include those under the control of other organizations as well as those of the Board at these ports.

FACILITIES OF SIX OF THE PRINCIPAL HARBOURS OF CANADA, AS AT DEC. 31, 1938.

Item.	Halifax.	Saint John.	Quebec.	Three Rivers.	Montreal.	Vancouver.
Minimum depth of approach channel. ft.	50	30	35	30	32·5	35
Harbour railway.................miles	[1]	57	32	Nil	58·5	35
Piers, wharves, jetties, etc........ No.	46[2]	17	36	3	101	27
Length of berthing................ ft.	32,716	14,383	32,505	7,400	54,863	28,600
Transit shed floor space...........sq.ft.	1,236,804	824,000	743,642	192,000	2,043,000	1,310,000
Cold storage warehouse capacity. .cu. ft.	1,000,000	880,000	500,000	Nil	4,628,000	1,277,000
Grain Elevators—						
Capacity...................... bu.	2,200,000	3,000,000	4,000,000	2,000,000	15,162,000	18,653,000
Loading rate.............bu. per hr.	75,000	135,000	90,000	32,000	400,000	312,000
Floating crane capacity........... tons	75	Nil	50	Nil	75	50
Coal dock storage capacity........ "	63,000	34,000	214,750	300,000	2,000,000	[3]
Oil tank storage capacity.......... gal.	75,307,610	9,818,000	22,280,000	Nil	Nil	79,854,000

[1] There is no harbour railway at Halifax but there are the following railway facilities: railway line at Dartmouth, 30·66 miles; storage yards, 68·67 miles; private sidings, 11·72 miles.

[2] Excluding Government piers.

[3] Not reported.

Public Harbours and Harbour Masters.—In other ports, the Governor in Council, as formerly, may create public harbours by proclamation, as provided by Part X of the Canada Shipping Act (c. 44, 1934), and the Minister of Transport may, from time to time, appoint harbour masters for these ports, who will administer them under rules and regulations approved by the Governor in Council. Remuneration of these harbour masters will be from fees levied on vessels under the terms of the Act.

Graving Docks.—The Department of Public Works of the Dominion Government has constructed five dry docks, dimensions of which are shown in Table **6.** The dock at Kingston, Ont., is under lease to the Kingston Shipbuilding Company, while the old Esquimalt Dry Dock was temporarily transferred to the Department of National Defence on Nov. 1, 1934. This transfer is to be effective until such time as the dock is commercially required, when it will be returned to the control of the Department of Public Works. The large dry docks at Lauzon, Que., and Esquimalt, B.C., can be divided into two parts and were built at a cost of approximately $3,850,000 each. Under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17), several docks have been subsidized by payments of 3 to 4 p.c. per annum on the original cost for a given number of years, as shown in Table **7.**

6.—Dimensions of Graving Docks Owned by the Dominion Government.

Location.	Length.	Width at—			Depth of Water on Sill.	Rise of Tide.	
		Coping.	Bottom.	Entrance.		Spring.	Neap.
	ft.	ft.	ft.	ft.	ft.	ft.	ft.
Lauzon, Que., *Champlain*	1,150	144	105	120	40·0 H.W.	18	13·3
Lauzon, Que., *Lorne*	600·3	100	59·5	62	25·8 H.W.	18	13·3
Esquimalt, B.C. (old dock)	450·7	90	41	65	29·0 H.W.	7 to 10	3 to 8
Esquimalt, B.C.	1,173	149	126	135	40·0 H.W.	7 to 10	3 to 8
Kingston, Ont	353·5	79	47	55	16·0	–	–

7.—Dimensions and Cost of Graving Docks Subsidized under the Dry Dock Subsidies Act, 1910.

Location.	Length.	Width.	Depth over Sill.	Total Cost.	Subsidy.
	ft.	ft.	ft.	$	–
Collingwood No. 1, Ont.[1]	515·8	59·8	14·8	500,000	3 p.c. for 20 years.
Collingwood No. 2, Ont.[1]	413·2	95	19·2	306,965	3 p.c. for 20 years.
Port Arthur, Ont	708·3	77·6	16·2	1,258,050	3 p.c. for 20 years.
Montreal, Que. (floating dock), *Duke of Connaught*	601	100	31·5	3,000,000	3½ p.c. for 35 years.
Prince Rupert, B.C. (floating dock)	600	100	32	2,199,168	3½ p.c. for 35 years.
Saint John, N.B.	1,164·5	133	40	5,500,000	4½ p.c. for 35 years.
North Vancouver, B.C. (floating dock)	556·5	98	28	2,500,000	4½ p.c. for 35 years.

[1] Subsidy payments have been completed.

Subsection 5.—Government Administrative Services.

The services covered by this subsection are those dealing with the pilotage service, steamship inspection, sea-faring personnel, and accidents to shipping.

Pilotage.—This service functions under the provisions set forth in Part VI of the Canada Shipping Act (c. 44, 1934). The necessity for pilots is that qualified men may offer their services to the stranger in local and confined waters. At the same time, pilotage might also be considered as a method of insurance—the fewer accidents, the cheaper insurance rates will be.

There are 40 pilotage districts in Canada, eight of which, namely, Sydney, Halifax, Saint John, Quebec, Montreal, St. Lawrence-Kingston-Ottawa, British Columbia, and Churchill, are under the Minister of Transport as Pilotage Authority. The Pilotage District of New Westminister, B.C., is under a local authority. The other districts function under local Pilotage Authorities appointed by the Governor in Council under the provisions of the Canada Shipping Act.

Table 8 shows the number and aggregate tonnage of ships using pilots for the major Canadian ports during the two latest fiscal years. Corresponding statistics are not available for the St. Lawrence-Kingston-Ottawa district.

8.—Details of Pilotage, by Districts, fiscal years 1937 and 1938.

District.	1937.			1938.		
	Pilots.	Ships Piloted In and Out.	Net Tonnage.	Pilots.	Ships Piloted In and Out.	Net Tonnage.
	No.	No.		No.	No.	
Sydney	15	2,238	2,566,588	19	2,332	2,758,292
Halifax	21	2,185	7,340,044	20	2,190	7,757,549
Saint John	12	860	2,626,362	12	958	2,887,054
Quebec	58	3,888	13,996,541	60	3,621	13,620,553
Montreal	77	5,757	14,553,619	78	5,863	14,645,178
Churchill	2	30	91,110	1	7	17,157
British Columbia	35	3,953	15,594,831	34	3,514	14,141,137
New Westminster	7	502	1,759,798	7	966	3,457,444

Steamship Inspection.—The Steamship Inspection Service provided for under Part VII of the Canada Shipping Act, 1934, consists of a headquarters staff, at Ottawa, and staffs of inspectors at the principal ocean and inland ports. The Act provides for a Board, known as the Board of Steamship Inspection, which decides on questions arising out of the administration of the Act. The Steamship Inspection Service is responsible for the administration and carrying out of the provisions of Part VII of the Act respecting the periodic inspection of power-driven ships and the issue of inspection certificates, the assignment of load lines, the conditions under which dangerous goods may be carried in ships, and the protection against accident of workers employed in loading or unloading ships. The Steamship Inspection Service is also responsible for the administration and carrying out of the provisions of Part II of the Act relating to the certification and employment of marine engineers.

9.—Steamship Inspection, by Inspection Divisions, fiscal years 1937 and 1938.

Year and Division.	Vessels Inspected.				Vessels Not Inspected.	
	Registered or Owned in the Dominion.		Registered or Owned Elsewhere.			
	No.	gross tonnage.	No.	gross tonnage.	No.	gross tonnage.
1937.						
Halifax	101	127,837	15	50,609	Nil	-
Saint John	37	49,973	4	17,449	56	19,525
Quebec	54	36,197	Nil	-	10	3,126
Sorel	73	45,535	“	-	48	24,212
Montreal	115	109,085	“	-	81	12,677
Kingston	72	95,244	13	785	17	19,195
Toronto	240	464,352	28	35,176	17	14,349
Midland	105	53,889	2	4,939	37	26,478
Port Arthur	62	58,147	Nil	-	69	5,629
Vancouver	215	100,686	13	82,129	60	13,773
Victoria	70	89,478	6	28,212	29	16,270
Totals, 1937	**1,144**	**1,230,423**	**81**	**219,299**	**424**	**155,234**
1938.						
Halifax	94	150,705	21	107,937	Nil	-
Saint John	51	52,256	2	6,221	45	34,755
Quebec	83	49,174	Nil	-	13	3,933
Sorel	78	45,137	“	-	54	37,965
Montreal	125	187,787	5	52,661	59	53,473
Kingston	71	78,562	16	885	21	28,748
Toronto	212	360,486	34	37,706	8	6,814
Collingwood[1]	3	105	Nil	-	Nil	-
Midland	99	39,322	3	7,565	31	12,115
Port Arthur	77	91,134	Nil	-	63	4,419
Vancouver	212	97,252	14	77,910	69	13,563
Victoria	74	90,821	4	3,747	26	18,236
Totals, 1938	**1,179**	**1,242,741**	**99**	**294,632**	**389**	**214,021**

Year and Division.	Vessels Subject to Inspection when in Commission.		Vessels Added to the Dominion Register.		Vessels Lost, Broken Up, or Destroyed.	
	No.	gross tonnage.	No.	gross tonnage.	No.	gross tonnage.
1937.						
Halifax	116	178,446	Nil	-	2	1,478
Saint John	97	86,947	3	162	Nil	-
Quebec	64	39,323	2	485	“	-
Sorel	121	69,747	1	22	“	-
Montreal	196	121,762	Nil	-	1	1,981
Kingston	102	115,224	2	17	3	2,104
Toronto	285	513,877	5	9,469	4	1,874
Midland	144	85,306	Nil	-	4	193
Port Arthur	131	63,776	1	103	5	708
Vancouver	288	196,588	5	243	16	12,391
Victoria	105	133,960	1	2,054	4	6,324
Totals, 1937	**1,649**	**1,604,956**	**20**	**12,555**	**39**	**27,053**
1938.						
Halifax	115	258,642	2	469	Nil	-
Saint John	98	93,232	4	1,059	“	-
Quebec	96	53,167	6	1,036	2	1,119
Sorel	132	83,102	5	772	5	3,437
Montreal	189	293,921	Nil	-	Nil	-
Kingston	108	108,195	7	7,777	3	1,380
Toronto	254	405,006	3	338	5	204
Collingwood[1]	Nil	-	Nil	-	Nil	-
Midland	133	59,002	“	-	6	12,333
Port Arthur	140	95,553	8	611	10	1,931
Vancouver	295	188,725	9	4,811	10	3,714
Victoria	104	112,804	3	2,567	1	679
Totals, 1938	**1,664**	**1,751,349**	**47**	**19,440**	**42**	**24,797**

---

[1] From October, 1937. Previous to October, inspection service was administered from Toronto and Midland.

Seamen Shipped and Discharged.—Table **10** shows, for each year from 1918 to 1937, the numbers of seamen shipped and discharged at Canadian ports under the provisions of the Canada Shipping Act (R.S.C., 1927, c. 186 and c. 44, 1934).

10.—Seamen Shipped and Discharged at Canadian Ports, calendar years 1918-37.

NOTE.—Figures for 1908-17 will be found at p. 690 of the 1938 Year Book.

Calendar Year.	Seamen Shipped.	Seamen Discharged.	Calendar Year.	Seamen Shipped.	Seamen Discharged.
	No.	No.		No.	No.
1918	16,516	12,930	1928	28,748	25,763
1919	18,208	13,649	1929	31,374	29,483
1920	22,569	19,719	1930	26,983	25,670
1921	18,444	17,103	1931	24,891	24,289
1922	25,689	24,558	1932	25,313	23,472
1923	31,407	30,195	1933	27,038	23,148
1924	30,687	29,018	1934	27,234	23,858
1925	31,772	28,472	1935	26,527	23,924
1926	31,869	27,413	1936	29,052	30,269
1927	28,137	25,863	1937	27,924	25,491

Wrecks and Casualties.—The figures of Table **11**, supplied by the Department of Transport, apply to vessels of every nationality in respect of wrecks and casualties in Canadian waters, and to Canadian vessels in respect of wrecks and casualties in other waters. The returns in some years cover wrecks and casualties of previous years.

11.—Canadian Wrecks and Casualties, calendar years 1918-37.

NOTE.—For figures for the years 1870-1910, see Canada Year Book, 1911, p. 381; and for 1911-17, p. 691 of the 1938 edition.

Year.	Casualties.	Net Tonnage.	Lives Lost.	Stated Damages.	Year.	Casualties.	Net Tonnage.	Lives Lost.	Stated Damages.
	No.	tons.	No.	$		No.	tons.	No.	$
1918	226	312,928	402[1]	1,818,895	1928	504	558,251	64	5,418,236
1919	240	205,720	100	1,808,690	1929	451	459,394	12	4,740,620
1920	227	222,928	28	1,643,825	1930	551	447,169	66	3,077,009
1921	260	588,503	38	1,809,328	1931	477	404,157	7	2,696,019
1922	277	604,423	27	451,312	1932	452	406,194	40	3,478,575
1923	376	480,713	50	3,184,749	1933	445	372,545	19	1,292,618
1924	224	215,470	54	4,355,217	1934	484	400,714	39	1,716,294
1925	298	305,798	53	3,317,020	1935	467	496,109	19	2,842,402
1926	300	293,310	91	4,630,267	1936	545	512,582	34	3,108,671
1927	434	566,011	128	6,879,825	1937	495	445,602	31	1,571,387

[1] Includes 328 lives lost in the *Princess Sophia* disaster.

Section 2.—Financial Statistics of Waterways.

The principal statistics available to aid in making an appraisal of the cost of water-borne traffic consist of the record of public expenditures on waterways. Such expenditures are classified as investments which are shown in Table **12**, and as annual expenditures for maintenance and operation, shown in Table **13**, which are partly balanced by the revenues shown in Table **14.** Undoubtedly, in so far as capital expenditures for the permanent improvement of waterways are concerned, those of the Dominion Government cover the major part. There has been some expenditure by municipalities on local harbour facilities, while private capital expenditure is also confined almost entirely to terminal or dockage facilities. The investment in shipping, however, with the exception of the Canadian National (West Indies) Steamships, as shown at p. 689, has come almost entirely from private sources such as railway companies, steamship companies, industrial corporations, and private individuals. No figures are available regarding private investments in shipping except those appearing in the reports of the operating companies which cover only a portion of the field. Neither are there statistics showing the revenues of ship operators from passenger and freight traffic. In the case of railways, statistics show fairly completely: (1) the investment in plant, roadbed, etc.; (2) the revenues of the railways or the annual payment by the people of Canada for the passenger and freight transportation; and (3) the annual deficits which are also indirectly paid by the public whether as investors or taxpayers. No such picture can be given for water-borne traffic.

Subsection 1.—Capital and Operation Expenditures of Waterways.

In the following statement of investments by the Dominion Government, no amounts have been written off as a result of the destruction or abandonment of property such as the first, second, and third Welland canals and the Port Nelson terminal. Neither have the capital expenditures been reduced by allowances for depreciation. However, in the case of ports and facilities under the control of the National Harbours Board and other harbour commissions, allowance has been made for depreciation, obsolescence, etc., so that the figures given represent approximately present appraisal values. No figures are available for the Hamilton Harbour Commission and commissions controlling a number of other smaller ports. For those ports and harbours not under the control of incorporated commissions, capital expenditures, made by the Department of Public Works, are included in the classification "Other harbours, rivers, construction, improvements, etc." but while expenditures have been distributed by provinces, no separation for individual ports or works has been made. Sydney, Sorel, Fort William, and Alberni are important ports for which improvement costs are included under their respective provincial totals.

The classification as between capital and operation expenditure is very difficult to make with respect to certain of the items, and cannot be regarded as exact for the long period. This difficulty applies particularly in the case of dredging where the distinction between the removal of accumulating silt and the deepening of a channel is largely one of opinion. For this reason the dredging account of the Department of Public Works is not included in the total investments of Table **12**, but is given at the end of the table since a large part of the work has been undoubtedly of the nature of a permanent improvement. This dredging account does not, however, include the total expenditures for dredging, as some dredging expenditures have been distributed with other items such as the St. Lawrence Ship channel, canals, and harbours. Both capital and operation costs include expenditures by the former Departments of Marine and of Railways and Canals, now the Department of Transport, and by the Department of Public Works, while the capital expenditures of the National Harbours Board and other independent commissions are also included in Table **12**.

12.—Capital Expenditures of the Dominion Government[1] on Waterways and Harbours to Mar. 31, 1938.

NOTE.—The dredging expenditures by the Department of Public Works shown separately at the end of this table cannot be accurately divided between capital and maintenance expenditures. However, since they have been largely for permanent improvements, they are shown here but are not included in the grand totals of capital expenditure. Other dredging expenditures are included in the various items.

Item.	Fiscal Year ended Mar.31,1938.	Total to Mar. 31, 1938.
	$	$
AIDS TO NAVIGATION AND MISCELLANEOUS WORKS.		
Lighthouses, construction, improvements, and apparatus	187,158	24,849,441
Radiotelegraph stations, construction	22,984	2,314,308
St. Lawrence Ship channel (below Montreal)[1]	1,184,311	71,318,795
Dominion steamers	91,071	6,891,071
Dredging plant	10,603	8,257,369
Slides and booms	Nil	1,733,192
Jacques Cartier bridge, Montreal	171	18,649,249[2]
Second Narrows bridge, Vancouver	Cr. 19,137	1,010,915[2]
Other roads and bridges	38,820	6,652,477
Other (Department of Public Works)	Nil	2,944,152
Other (Department of Transport)	"	3,206,150
TOTALS	1,515,981	147,827,119
CANALS.[3]		
St. Lawrence River—		
Lachine	6,650	16,259,435
Lake St. Louis	Nil	298,176
Soulanges	8,872	8,491,647
Beauharnois, old	Nil	1,955,902
Lake St. Francis	"	131,231
Cornwall	6,789	7,914,100
Williamsburg	4,458	1,761,805
Farran's Point	Nil	877,091
Galops	"	6,143,468
Rapide Plat	"	2,159,881
North channel, river reaches, and Galops channel	"	3,518,869
St. Lawrence Ship	282	738,360
Ottawa and Rideau Rivers—		
Ste. Anne lock	987	1,553,028
Carillon and Grenville	4,715	4,759,223
Rideau (including Tay)	18,468	5,698,653
Richelieu River—		
St. Ours lock	Nil	921,246
Chambly	4,523	1,953,304
CANALS—concluded.		
Welland Ship	71,191	132,796,999
Prior Welland	Nil	30,189,179
Sault Ste. Marie	"	5,261,622
Trent	84,190	24,049,288
Murray	255	1,390,944
St. Peters	611	1,524,183
Culbute lock and dam	Nil	443,315
Baie Verte	"	44,388
Hungry Bay dykes	"	47,223
General	"	1,196,745
TOTALS	211,991	262,079,302
HARBOURS.		
Prescott elevator	12,673	5,029,430[2]
Port Colborne elevator	Cr. 895,840	2,383,773[2]
Port Nelson terminal	Cr. 30	6,240,171
Harbour Commissions—		
Halifax	Cr. 5,130	26,972,904[2]
Saint John	1,463,228	23,421,706[2]
Chicoutimi	Cr. 7,444	4,343,205[2]
Quebec	750,938	28,497,062[2]
Three Rivers	443,271	7,900,481[2]
Montreal	2,293,460	67,288,723[2]
Toronto	[4]	38,862,379[5]
Churchill	Cr. 151,186	13,189,694[2]
New Westminster	Nil	974,537[6]
Vancouver	239,269	24,597,519[2]
TOTALS	4,143,209	249,701,584
OTHER HARBOURS, RIVERS, CONSTRUCTION, IMPROVEMENTS, ETC.		
Prince Edward Island	98,797	2,310,738
Nova Scotia	534,973	14,283,115
New Brunswick	178,645	17,445,945
Quebec	1,652,796	36,991,598
Ontario	1,215,306	47,133,436
Manitoba	52,799	3,121,168
Saskatchewan, Alberta, and N.W.T.	57,832	1,210,139
British Columbia	350,990	24,643,528
Yukon	Nil	364,547
General	15,097	275,610
TOTALS	4,157,235	147,779,824
Grand Totals	**10,028,416**	**807,387,829**

Item.	Fiscal Year ended Mar.31,1938.	Total to Mar. 31, 1938.
EXPENDITURES ON DREDGING BY DEPARTMENT OF PUBLIC WORKS.	$	$
Prince Edward Island	81,228	2,450,220
Nova Scotia	419,345	10,864,465
New Brunswick	154,791	14,685,289
Quebec	597,651	16,446,688
Ontario	444,789	30,820,850
Manitoba	55,593	1,987,374
Saskatchewan, Alberta, and N.W.T.	145	195,628
British Columbia	322,699	12,509,604
Yukon	Nil	7,080
General	"	152,964
TOTALS	2,076,242	90,120,162

---

[1] Includes some expenditure not included in the 1938 Year Book and by authority other than the Dominion Government. [2] These are the fixed assets as reported by the National Harbours Board at Dec. 31, 1938. [3] Includes "Income expenditure" for buildings and permanent improvements to canals. [4] Not reported. [5] As reported by the Toronto Harbour Commission in their latest published report, that for Dec. 31, 1935. [6] Loans of the Dominion Government to the New Westminster Harbour Commission. Most of the facilities in the harbour are provided by commercial organizations.

Expenditures for maintenance and operation together with the revenues of a number of the principal harbours and terminal elevators have been eliminated from Tables **13** and **14** and shown separately in Table **15** since these facilities are now under the control of the National Harbours Board or other commission.

13.—Expenditures of the Dominion Government for Maintenance and Operation of Aids to Navigation, Canals, and Harbours, fiscal years 1935-38.

Item.	1935.	1936.	1937.	1938.
	$	$	$	$
AIDS TO NAVIGATION AND MISCELLANEOUS ITEMS.				
Lighthouses and Coast Service—				
Agencies, rents, and contingencies	186,145	195,889	196,854	229,095
Maintenance	741,926	777,059	1,557,108	1,688,347
Salaries of light-keepers	658,737	692,511		
Repairs to wharves	6,349	5,657	7,136	5,861
Ice-breaking (Thunder bay)	30,000	40,500	30,000	29,500
Radiotelegraph service	492,469	543,415	552,950	660,800
Dominion steamers	1,499,334	1,314,705	1,423,612	1,323,369
St. Lawrence Ship channel, operation and maintenance.	–	–	–	394,488[1]
Steamship inspection	116,960	125,791	126,065	167,279
Miscellaneous services relating to navigation	–	–	–	50,202[1]
Life saving	45,078	50,439	45,793	45,730
Hydrographic survey	404,922	408,697	407,645	[3]
Marine signal service	93,909	99,885	99,482	89,332
Administration of pilotage	86,227	103,518	90,281	124,064
Removal of obstructions	16,216	3,680	52,568	41,313
Subsidy to wrecking plants	40,000	43,750	45,000	45,000
Dredging plant	74,308	70,163	66,641	54,982
Roads and bridges	33,902	48,213	61,925	84,726
Miscellaneous (D.P.W.)	81,285	93,003	33,663	11,276
TOTALS	4,607,767[2]	4,616,875[2]	4,796,723[2]	5,045,364
CANALS.				
St. Lawrence River—				
Soulanges	112,843	141,237	134,873	134,356
Lachine	359,692	352,771	329,181	307,506
Cornwall	148,876	143,833	125,898	159,450
Williamsburg	90,845	94,029	90,528	86,511
Head offices	71,460	78,364	73,366	102,177[4]
Dredge vessels	20,126	20,439	34,744	40,200
Hungry Bay dyke—St. Barbe	7,230	5,692	5,287	5,165
Welland	57,480	651,188	667,013	712,259
Welland Ship	568,423			
Sault Ste. Marie	55,517	52,635	48,281	46,915
Richelieu River—				
St. Ours lock	6,386	9,321	9,876	8,544
Chambly	59,018	87,525	71,851	66,458
Ottawa and Rideau Rivers—				
St. Anne lock	8,905	9,426	11,342	11,091
Carillon and Grenville	73,601	81,866	88,454	58,005
Rideau (including Tay)	141,376	152,113	150,189	155,875
Trent	178,295	187,806	199,135	200,781
Murray	13,344	17,924	10,482	11,305
St. Peters	9,875	9,679	10,251	9,880
General	Nil	Nil	1,329	Nil
TOTALS	1,983,292	2,095,848	2,062,080	2,116,478
HARBOURS, ELEVATORS, RIVERS, ETC.				
Port Colborne elevator	88,583	89,481	85,512	[5]
Prescott elevator	86,317	97,220	78,572	[5]
Churchill elevator	186,316	117,392	98,072	[5]
Port of Churchill	[6]	71,916	68,104	[5]
Other Harbours and Rivers—				
Prince Edward Island	64,072	86,224	82,404	36,714
Nova Scotia	315,568	497,934	291,699	160,217
New Brunswick	348,990	432,337	383,883	381,739
Quebec	635,563	438,660	523,945	446,782
Ontario	186,103	218,304	130,923	97,215
Manitoba	28,251	38,643	30,992	33,935
Saskatchewan, Alberta, and N.W.T.	3,018	2,637	2,406	25,449
British Columbia	403,295	319,813	384,478	396,507
Yukon	Nil	14,571	8,641	5,000
General	434,252	453,597	373,998	405,834
TOTALS	2,780,328	2,878,729	2,543,629	1,989,392
Grand Totals	**9,371,387**[2]	**9,591,452**[2]	**9,402,432**[2]	**9,151,234**

For footnotes see end of table, p. 686.

13.—Expenditures of the Dominion Government for Maintenance and Operation of Aids to Navigation, Canals, and Harbours, fiscal years 1935-38—concluded.

Item.	1935.	1936.	1937.	1938.
EXPENDITURES BY DEPARTMENTS.	$	$	$	$
Railways and Canals	2,344,508	2,471,857	[7]	[7]
Marine	4,418,272[2]	4,405,496[2]	[7]	[7]
Transport	[7]	[7]	7,026,834[2]	7,010,858
Public Works	2,608,607	2,714,099	2,375,598	2,140,376

[1] Reported in this form for the first time in 1938. [2] Revised since the publication of the 1938 Year Book to include "Steamship inspections". [3] Transferred to the Department of Mines and Resources. [4] Including Ottawa administration for the first time in 1938. [5] Transferred to the National Harbours Board and shown for latest calendar years in Table 15. [6] Charged to Hudson Bay Railway. [7] The Department of Transport in 1937 and 1938 included the former Departments of Marine and of Railways and Canals.

14.—Revenues of the Dominion Government from the Operation of Aids to Navigation, Canals, and Harbours, fiscal years ended Mar. 31, 1935-38.

Item.	1935.	1936.	1937.	1938.
AIDS TO NAVIGATION AND MISCELLANEOUS ITEMS.	$	$	$	$
Steamship inspection[1]	103,698	107,677	119,140	112,289
Radio revenue—traffic	52,670	56,714	59,840	63,784
Dominion steamers	2,928	2,759	793	3,050
Earnings of dredges and plant	431	5,114	8,170	2,388
Sundries and miscellaneous	47,573[2]	46,084[2]	61,650[2]	38,581
TOTALS	207,300[2]	218,348[2]	249,593[2]	220,092
CANALS.[3]				
St. Lawrence River—				
Lachine	187,114	166,746	187,093	205,157
Beauharnois	59,516	59,526	59,619	59,660
Soulanges	4,257	4,057	4,175	4,144
Cornwall	25,560	38,660	32,306	66,389
Williamsburg	2,566	3,018	3,230	3,819
Welland	22,597	191,287	208,691	1,085,611
Welland Ship	152,507			
Sault Ste. Marie	217	217	217	217
Richelieu River—				
Chambly	1,244	1,150	1,157	1,477
St. Ours lock	[4]	[4]	60	55
Ottawa and Rideau Rivers—				
Ste. Anne lock	387	189	241	242
Carillon and Grenville	1,628	1,559	1,567	1,744
Chats Falls	1	1	1	1
Rideau (including Tay)	10,134	10,189	10,375	10,993
Trent	6,067	6,448	6,512	426,315
Murray	254	351	311	304
St. Peters	168	157	169	154
Sundries	3	2	3	4
TOTALS	474,220	483,557	515,727	1,866,286
HARBOURS.				
Port of Churchill	[5]	3,264	2,365	[6]
Prescott elevator	69,552	175,052	161,815	[6]
Port Colborne elevator	184,116	143,004	206,767	[6]
Churchill elevator	109,983	84,888	117,091	[6]
Earnings of dry docks	73,983	62,500	80,330	87,806
Rent, Kingston graving dock	6,050	12,100	Nil	12,100
Ferry privileges	2,706	3,022	2,847	2,511
Piers and wharves	111,973	111,189	139,849	175,066
Harbour dues	2,765	2,800	4,272	48,808
TOTALS	561,128	597,819	715,336	326,291
Grand Totals	**1,242,648**[2]	**1,299,724**[2]	**1,480,656**[2]	**2,412,669**

[1] Not included prior to 1938. [2] Revised since publication of the 1938 Year Book. [3] No tolls are charged for the use of Canadian canals. The revenue arises from property leases, water rights, etc. [4] Included with Chambly Canal. [5] Included with Hudson Bay Railway. [6] Transferred to National Harbours Board.

15.—Operating Revenues and Expenditures of Harbours and Elevators under the National Harbours Board and the New Westminster Harbour Commission, calendar years 1936-38.

Item.	1936.	1937.	1938.
	$	$	$
Halifax—			
Operating revenues..	510,179	581,740	599,856
Operating expenses...	433,040	429,472	420,765
Net operating revenues..........	77,139	152,268	179,091
Saint John—			
Operating revenues..	367,448	435,952	445,726
Operating expenses...	256,380	240,302	242,544
Net operating revenues..........	111,068	195,650	203,182
Chicoutimi—			
Operating revenues..	21,307	21,750	21,254
Operating expenses...	18,639	14,361	13,374
Net operating revenues..........	2,668	7,389	7,880
Quebec—			
Operating revenues..	482,542	447,780	488,013
Operating expenses...	673,838	572,334	537,316
Net operating revenues..........	−191,296	−124,554	−49,303
Three Rivers—			
Operating revenues..	122,347	172,309	191,881
Operating expenses...	32,191	18,023	33,242
Net operating revenues..........	90,156	154,286	158,639
Churchill—			
Operating revenues..	–	7,441	83,867
Operating expenses...	–	148,331	139,101
Net operating revenues..........	–	−140,890	−55,234
Port Colborne Elevator—			
Operating revenues..	–	126,964	250,705
Operating expenses...	–	99,906	134,475
Net operating revenues..........	–	27,059	116,230
Prescott Elevator—			
Operating revenues..	–	58,085	69,165
Operating expenses...	–	81,943	76,612
Net operating revenues..........	–	−23,858	−7,447
Montreal—			
Operating revenues..	4,238,836	4,377,350	4,917,837
Operating expenses...	2,209,179	2,136,800	2,095,656
Net operating revenues..........	2,029,657	2,240,550	2,822,181
Vancouver—			
Operating revenues..	1,792,980	1,636,648	1,453,905
Operating expenses...	718,997	708,830	566,397
Net operating revenues..........	1,073,983	927,818	887,508
New Westminster—			
Operating revenues..	43,393	40,994	44,969
Operating expenses...	30,539	32,629	36,675
Net operating revenues..........	12,854	8,365	8,294

Shipping Subsidies.—The information given in the following table formerly appeared under the part of this chapter dealing with the Post Office but is now shown here because these subsidies are granted to assure the required steamship services rather than for the mere carriage of mails.

16.—Mail Subsidies and Steamship Subventions, fiscal years 1936-38.

NOTE.—The figures in the following table were supplied by F. E. Bawden, Director of Steamship Subsidies, Department of Trade and Commerce. Such data appear annually in the report of the Auditor General and represent the amounts paid in connection with contracts made under statutory authority by the Department of Trade and Commerce for trade services, including the conveyance of mails.

Service.	1936.	1937.	1938.
	$	$	$
Atlantic Ocean—			
Canada and the United Kingdom..............................	500,000	250,000	250,000
Canada and South Africa..................................	112,500	112,500	112,500
Prince Edward Island and Boston............................	35,000	20.000	Nil
Pacific Ocean—			
British Columbia, Australia, and/or China....................	118,800	136,650	64,350
Canada, China, and Japan................................	749,000	600.000	600,000
Canada and New Zealand, on the Pacific......................	200,000	292,308	300,000
Prince Rupert, B.C., and the Queen Charlotte islands..........	12,000	12,000	12,000
Vancouver and the British West Indies........................	33,000	30,000	30,000
Vancouver and northern ports of British Columbia.............	18,000	18,000	18,000
Victoria, Vancouver, way ports, and Skagway..................	12,000	12,000	12,000
Victoria and west coast Vancouver island......................	10,000	10,000	10,000
British Columbia and South Africa...........................	84,000	84,000	77,000

16.—Mail Subsidies and Steamship Subventions, fiscal years 1936-38—concluded.

Service.	1936.	1937.	1938.
	$	$	$
Local Services—			
Baddeck and Iona	8,000	8,000	8,000
Charlottetown and Pictou	25,000	30,000	30,000
Charlottetown, Victoria, and Holliday's wharf	4,213	Nil	Nil
Chester and Tancook island (winter)	1,584	1,600	1,600
Grand Manan and the mainland	33,000	33,000	33,000
Halifax and Bay St. Lawrence	2,000	2,000	[1]
Halifax, Canso, and Guysborough	6,750	6,750	6,750
Halifax, LaHave, and LaHave River ports	2,000	1,981	2,000
Halifax and Sherbrooke	900	882	2,900
Halifax, south Cape Breton, and Bras d'Or Lake ports	3,500	3,500	5,500
Halifax, Spry Bay, and Cape Breton ports	3,961	4,000	[2]
Halifax and west coast of Cape Breton	4,000	3,923	3,367
Ile aux Coudres and Les Eboulements	1,100	1,100	1,100
Mulgrave, Arichat, and Canso	33,750	33,750	37,000
Mulgrave and Guysborough, calling at intermediate ports	9,469	9,317	9,500
Murray Bay and north shore (winter service)	40,000	40,000	40,000
Parrsboro, Kingsport, and Wolfville	1.873	1,500	2,500
Pelee island and the mainland	8,250	8,250	7,000
Pictou, Mulgrave, and Cheticamp	11,000	11,000	11,500
Pictou, Souris, and the Magdalen islands	37,500	37,500	37,500
Quebec, Natashquan, and Harrington, and other ports on the north shore of the gulf of St. Lawrence	84,500	85,000	85,000
Quebec or Montreal and Gaspe, and other ports on the south shore of the gulf of St. Lawrence	60,000	60,000	60,000
Rimouski, Matane, and the north shore of the lower St. Lawrence	50,000	50,000	50,000
Rivière du Loup and Tadoussac, and other north shore ports	12,000	10,000	10,000
St. Catherine's Bay and Tadoussac	3,250	3,500	3,500
Saint John and Bridgetown	1,000	800	800
Saint John, Bear River, Annapolis, and Granville	2,000	1,500	1,500
Saint John and Margaretville, and other ports on the bay of Fundy	2,800	2,500	2,500
Saint John and Minas Basin ports	3,500	5,000	5,000
Saint John and St. Andrews, calling at intermediate ports	3,000	3,000	3,000
Saint John, Westport, and Yarmouth, and other way ports	13,000	13,000	13,000
Saint John and Weymouth	633	1,000	1,000
Summerville, Burlington, and Windsor, N.S.	750	750	750
Sydney and Bay St. Lawrence, calling at way ports	25,000	25,000	25,000
Sydney and Bras d'Or Lake ports, and ports on the west coast of Cape Breton	22,500	22,500	22,500
Sydney and Whycocomagh	16,000	16,000	16,000
Inspection of subsidized steamship services	4,526	4,853	4,593
Totals	**2,426,609**	**2,119,914**	**2,029,210**

[1] Combined with Halifax and south Cape Breton.

[2] Combined with Halifax and Sherbrooke.

Subsection 2.—Merchant Marine Services Operated by the Canadian Government.

Canadian Government Merchant Marine.—The circumstances under which the Canadian Government became possessed of and responsible for the operations of a merchant marine are explained on p. 776 of the 1934-35 Year Book.

This merchant fleet reached its greatest development in 1924 and at Dec. 31 of that year numbered 57 vessels of a total deadweight tonnage of 353,450, representing an original capital investment of $79,661,921. On June 8, 1936, the 10 remaining vessels were disposed of for a consideration of $389,444. A table showing the operating results from 1919 to 1936 appeared at p. 689 of the 1937 Year Book.

Canadian National (West Indies) Steamships.—In conformity with the Canada-West Indies Trade Agreement Act of 1926 (16-17 Geo. V, c. 16), the Dominion Government has provided direct steamship services to the West Indies through the medium of Canadian National (West Indies) Steamships, Ltd. The service is provided by a fleet of eleven vessels of a total deadweight tonnage of 62,761. Five of these craft, known as the 'Lady' ships, were specially constructed for passenger service on this route, while the remaining six vessels previously formed part of the Canadian Government Merchant Marine fleet, and were taken over by the Canadian National (West Indies) Steamships, Ltd., for operating purposes, under entrusting agreements with the respective companies that owned the ships. The investment in vessels at Dec. 31, 1937, amounted to $10,954,693, mainly made up of the construction cost of the 'Lady' ships and the present-day valuation of the other six ships, together with the cost of conversion for use in the West Indies service of three of the latter. The financial results of the operations of the Canadian National (West Indies) Steamships, Ltd., have been as follows:—

Calendar Year.	Operating Revenues.	Operating Expenses.	Operating Net.	Depreciation.	Interest.	Book Loss.
	$	$	$	$	$	$
1929	3,332,683	3.780,524	−447,841	227,315	442,739	1,117,895
1930	3,792,694	4,315,831	−523,137	288,999	550,519	1,362,655
1931	3,648,986	4,095,555	−446,569	294,141	604,651	1,345,361
1932	3,323,077	3,606,793	−283,716	321,261	688,037	1,293.014
1933	2,956,974	3,454,972	−497,998	319,967	726,108	1,544,073
1934	3,509,738	3,606,416	− 96,678	319,967	762,033	1,178,678
1935	3,816,246	3,616,215	+200.031	325,513	788.814	917,390
1936	4,322,593	3,765,194	+557,399	328,235	800,282	574,213
1937	4,676,684	4,018,146	+658,538	328,287	808,432	481,275

Section 3.—Water Traffic and Services.

Complete statistics, comparable to those given for the railways, showing all the freight carried by water, are not available. Indeed it would be very difficult to obtain a record of the traffic handled by small independent coasting vessels. However, there is a record of the number and tonnage of ships calling at all ports and of all the cargoes which pass through the canals.

Subsection 1.—Shipping.

Canadian shipping may be divided into three classes: (1) ocean or sea-going shipping; (2) inland or rivers and lakes international shipping (exclusive of ferriage); and (3) coasting trade or coastwise shipping. Ocean shipping covers the sea-going vessels arriving or departing from Atlantic and Pacific Coast ports, including St. Lawrence River ports up to Montreal. Inland international shipping is the term used to cover shipping between Canadian and United States ports on the Great Lakes and international rivers, and on lakes and rivers accessible to shipping from United States ports such as the Ottawa, Rideau, Trent, etc. (Ferriage is, however, excluded from this and other classes of shipping.) Coastwise shipping or the coasting trade covers shipping between one Canadian port and another on the Atlantic coast, on the Pacific coast, and on the inland international lakes and rivers or lakes and rivers accessible to them. It does not, however, include shipping on isolated Canadian waterways, such as the Mackenzie river, lake Winnipeg, lake St. John, etc.

Ocean Shipping.—Canadian ocean shipping dates back to the days of early European fishermen who frequented the shores of Newfoundland and the Maritime Provinces. Later on, exploration and settlement produced a larger volume of traffic.

The first ocean-going vessels in Canada were probably built by Pont-Gravé, one of the first settlers in New France, and soon afterwards Talon and Hocquart, intendants of the colony, realizing the advantages offered by the timber resources available, gave ship-building every encouragement. Shipyards were established at Quebec and other points along the St. Lawrence, and these, together with later establishments in the Maritime Provinces and on the western coast, have formed the principal bases of Canadian shipping on the Atlantic and the Pacific.

Canadian shipping attained some prominence in the days of fast wooden sailing vessels, and also at a later date when steam power first came into use. In 1833, the *Royal William*, a Canadian ship built to ply between Quebec and Halifax, crossed the Atlantic from Pictou to London, and was the first vessel to navigate the Atlantic entirely under steam power. At the present time, in addition to other lines, the Canadian Pacific Railway operates fleets on the Atlantic and Pacific oceans, and the Dominion Government operates a fleet in the West Indies trade.

The following table has been compiled from the Shipping Reports of the Department of National Revenue for the individual fiscal years 1926-38.

17.—Sea-Going Vessels Entered and Cleared at Canadian Ports with Cargo and in Ballast, fiscal years 1926-38.

NOTE.—For the years 1868-1910, see Canada Year Book, 1911, p. 379; for 1911-25 see the 1938 Year Book, p. 698.

Fiscal Year.	British, Entered and Cleared.			Canadian, Entered and Cleared.			Foreign, Entered and Cleared.		
	No.	Tons Register.	Freight Tons.[1]	No.	Tons Register.	Freight Tons.[1]	No.	Tons Register.	Freight Tons.[1]
1926....	6,515	17,749,067	7,755,145	17,906	9,703,054	3,488,321	18,117	18,202,875	8,658,455
1927....	6,448	18,117,525	6,909,197	16,746	8.926,138	3,507,934	19,111	19,106,106	8,856,010
1928....	6,253	18,738,027	8,643,925	16,716	9,021,264	3,597,639	18,561	20,455,343	10,450,038
1929....	6,400	21,625,660	10,448,795	18,005	9,235,036	3,433,603	21,021	23,547,831	11,317,358
1930....	5,634	20,171,383	8,206,656	18,145	9,673,948	3,171,136	19,689	23,146,901	9,386,904
1931....	5,826	20,008,005	7,430,148	17,865	11,707,129	2,441,542	17,906	22,885,015	8,783,961
1932....	5,754	19,025,391	6,751,209	15,919	11,808,667	2,570,564	16,604	21,506,183	8,198,158
1933....	6,323	20,865,151	9,129,496	13,864	9.041,203	1,929,213	15,741	19,860,478	7,314,492
1934....	6,831	22,480,487	8,746,708	17,110	9,391,625	2,474,602	15,464	23,573,742	7,663,478
1935....	7,678	23,676,256	9,392,527	18,788	11,450,147	2,567,636	16,737	21,933,445	8,375,350
1936....	8,095	24,593,603	10,377,917	21,663	13,104,753	3,030,463	16,405	20,354,271	8,914,230
1937....	9,581	27,299,731	12,775,530	23,905	13,334,472	3,085,518	17,998	22,313,808	11,072,578
1938....	9,027	25,710,374	12,134,908	27,243	15,502,958	3,250,695	17,496	21,610,486	11,195,306

Fiscal Year.	Totals Entered.			Totals Cleared.			Totals, Entered and Cleared.		
	No.	Tons Register.	Freight Tons.[1]	No.	Tons Register.	Freight Tons.[1]	No.	Tons Register.	Freight Tons.[1]
1926....	21,185	22,837,720	6,351,872	21,353	22,817,276	13,550,049	42,538	45,654,996	19,901,921
1927....	21,382	23,224,281	5,856,591	20,923	22,925,488	13,416,550	42,305	46,149,769	19,273,141
1928....	20,903	24,240,847	7,024,759	20,627	23,973,787	15,666,843	41,530	48,214,634	22,691,602
1929....	22,531	27,464,158	7,155,130	22,895	26,944,369	18,044,626	45,426	54,408,527	25,199,756
1930....	21,583	27,155,766	8,471,107	21,885	25,836,466	12,293,589	43,468	52,992,232	20,764,696
1931....	20,737	28,064,762	7,814,115	20,860	26,535,387	10,841,536	41,597	54,600,149	18,655,651
1932....	19,175	27,003,210	6,820,915	19,102	25,337,031	10,699,016	38,277	52,340,241	17,519,931
1933....	17,778	25,044,389	6,570,607	18,150	24,722,443	11,802,594	35,928	49,766,832	18,373,201
1934....	19,501	28,209,947	7,667,915	19,904	27,235,907	11,216,873	39,405	55,445,854	18,884,788
1935....	21,419	28,512,257	9,099,787	21,784	28,547,591	11,235,726	43,203	57,059,848	20,335,513
1936....	22,835	28,895,751	10,025,922	23,328	29,156,876	12,296,688	46,163	58,052,627	22,322,610
1937....	25,348	31,145,065	11,142,357	26,136	31,802,946	15,791,269	51,484	62,948,011	26,933,626
1938....	26,407	31,421,775	12,698,849	27,359	31,402,043	13,882,060	53,766	62,823,818	26,580,909

---

[1] Includes freight in both tons weight and tons measurement.

Inland Shipping.—Inland shipping is associated in its beginnings with the birch-bark canoe of the American Indian. Later the *bateau* and Durham boat came into common use after the migration of the U.E. Loyalists. In the absence at that time of any roads to make land travel possible, the St. Lawrence river and the Great Lakes formed the main highway to the interior. The route from Montreal to the Upper Lakes was broken at three places—from Montreal to Kingston transportation was by *bateau* or Durham boat; from Kingston to Queenston schooners were used; then, after the portage road from Queenston to Chippawa, the schooner was again taken to the destination.

In 1809, the *Accommodation*, the first Canadian steamship, was built for the Hon. John Molson, to run between Montreal and Quebec. On lake Ontario, the *Frontenac* was used from 1817 on a weekly service between York and Prescott and, following this beginning, came a period of great activity in lake and river shipping. In 1845, the *Gore* reached lake Huron by way of the Welland canal to carry on transport trade on the Upper Lakes, where previously there had not been enough traffic to support a large ship. Shipping on the Upper Lakes became brisker now, for there were settlers to be carried from Buffalo to the western United States and grain to be brought back. In this period Canadian shipping made its profit by carrying United States goods, for there was little traffic originating in the Canadian near-West.

Upon the advent of steam railways, water-borne traffic did not decrease but, on the contrary, increased, and at present the greater part of the western grain is shipped *via* the Great Lakes route to eastern ports. The iron ore and coal traffic between lake Superior and lake Erie is chiefly United States traffic and sometimes exceeds 80 million short tons in a year; the total traffic on these Upper Lakes alone is greater than that carried by all Canadian railways and about one-twelfth of that carried by all United States railways.

Totals of inland shipping are given for each fiscal year since 1929, and by provinces for the latest year, in Table **19**, p. 694.

Coasting Trade.—This form of water-borne traffic has assumed great importance in Canada owing to the long coast lines on the Atlantic and Pacific oceans and along the Great Lakes and St. Lawrence River system. The movement of grain from Fort William and Port Arthur to Canadian ports on the Lower Lakes and to Montreal is one important factor in coastwise shipping. The registered tonnage of vessels entered and cleared in the coastwise movement is shown for each fiscal year since 1929, and by provinces for the latest year, in Table **19**.

Shipping by Ports.—The volume of shipping in the leading ports of the provinces of Canada is shown in Table **18**. Details are given of the sea-going vessels arrived and departed, and of the total of all shipping (exclusive of ferriage) arrived at each port. Arrivals only for all shipping are given here because, especially in the case of small ports, arrivals, owing to the necessity for customs examination, are more completely reported than departures. In the fiscal year ended Mar. 31, 1938, the tonnage of sea-going vessels arriving at and departing from Vancouver exceeded that of any other port in Canada; Victoria was next, followed by Montreal and Halifax, but in respect to sea-going cargoes loaded and unloaded, Montreal led by a wide margin, followed by Vancouver, Sydney, Saint John, and Halifax.

18.—Numbers and Tonnages of Sea-Going Vessels Entered and Cleared and of All Vessels (Exclusive of Ferriage) Entered, at each Principal Canadian Port, fiscal year 1938.

NOTE.—For details of coastwise and inland international shipping at these ports and at all other ports of Canada, see the Shipping Report of the Dominion Bureau of Statistics for 1938.

Province and Port.	Sea-Going Vessels.						Total Shipping.	
	Arrived.			Departed.			Arrived.	
	No.	Tons Register.	Cargo.	No.	Tons Register.	Cargo.	No.	Tons Register.
			tons.			tons.		
Prince Edward Island—								
Charlottetown	41	31,078	19,600	51	27,004	10,292	607	224,436
Totals, P.E.I.	**67**	**38,637**	**28,451**	**80**	**35,755**	**19,349**	**1,012**	**326,269**
Nova Scotia—								
Baddeck	13	13,078	[2]	13	13,078	[2]	790	82,187
Canso	57	6,276	272	104	15,298	16,725	1,151	134,830
Digby	47	37,609	200	44	36,655	6,998	613	694,932
Halifax	1,307	3,151,193	1,075,115	1,501	3,209,288	351,588	2,928	3,889,933
Liverpool	139	93,949	13,246	135	87,523	107,326	270	169,510
Louisburg	126	181,069	323,808	156	220,460	393,249	445	373,350
Lunenburg	400	35,388	30,133	437	34,071	1,433	607	52,327
North Sydney	921	286,693	9,422	960	283,285	121,898	1,604	583,716
Pictou	19	16,047	8,189	42	40,592	21,116	518	226,310
Sydney	352	826,548	1,842,850	378	890,471	704,380	1,573	2,498,055
Yarmouth	590	538,670	23,128	563	507,452	20,816	1,003	646,256
Totals, Nova Scotia[1]	**5,524**	**5,660,509**	**3,368,633**	**6,200**	**5,936,780**	**3,035,986**	**17,789**	**10,418,208**
New Brunswick—								
Campobello	1,153	100,505	38	1,177	103,968	534	1,381	194,628
Dalhousie	25	74,945	11,229	34	106,011	86,484	50	134,492
St. Andrews	2,619	128,094	6,911	2,651	131,837	15,020	3,215	205,635
Saint John	897	1,651,870	417,886	900	1,612,312	1,271,208	2,829	2,622,880
Totals, New Brunswick[1]	**6,196**	**2,196,623**	**491,620**	**6,330**	**2,300,903**	**1,851,509**	**10,017**	**3,673,268**
Quebec—								
Gaspe	7	48,384	[2]	22	31,732	[2]	220	164,794
Hull	[2]	–	–	[2]	–	–	457	81,100
Lévis	4	4,759	12,729	[2]	–	–	139	168,450
Montreal	1,096	4,244,822	5,524,539	1,016	4,044,771	3,101,049	5,881	8,796,218
Port Alfred	55	118,000	213,149	65	171,807	149,518	291	634,946
Quebec	387	1,948,425	239,879	377	1,689,810	287,038	2,876	4,118,635
Rimouski	5	8,687	4,485	37	55,024	90,497	1,516	431,164
Sorel	77	207,345	376.011	77	185,227	200,487	948	1,609,919
Three Rivers	169	470,257	529,265	169	470,257	239,869	2,408	2,269,237
Totals, Quebec[1]	**1,870**	**7,118,737**	**6,920,316**	**1,806**	**6,671,656**	**4,072,219**	**16,423**	**18,836,292**
Ontario—								
Amherstburg	[2]	–	–	[2]	–	–	448	384,813
Brockville							1,076	443,400
Cobourg							415	1,285,882
Cornwall							360	374,397
Fort William							904	2,061,298
Hamilton							870	1,592,044
Kingston							3,126	1,485,533
Midland							245	427,299
Niagara Falls							1,367	995,439
Port Arthur							919	2,014,206
Port Colborne							791	1,444,060
Port McNicoll							124	323,776

---

[1] Totals include other smaller ports. [2] None reported.

18.—Numbers and Tonnages of Sea-Going Vessels Entered and Cleared and of All Vessels (Exclusive of Ferriage) Entered, at each Principal Canadian Port, fiscal year 1938—concluded.

Province and Port.	Sea-Going Vessels.						Total Shipping.	
	Arrived.			Departed.			Arrived.	
	No.	Tons Register.	Cargo.	No.	Tons Register.	Cargo.	No.	Tons Register.
			tons.			tons.		
Ontario—concluded.								
Prescott	[2]	–	–	[2]	–	–	900	1,064,355
St. Catharines	[2]	–	–	[2]	–	–	307	405,664
Sarnia	[2]	–	–	[2]	–	–	1,431	1,929,521
Sault Ste. Marie	[2]	–	–	[2]	–	–	1,446	2,145,183
Thorold	[2]	–	–	11	8,626	878	467	669,634
Toronto	27	21,157	4,262	[2]	–	–	2,975	3,259,243
Welland	[2]	–	–	[2]	–	–	231	311,755
Windsor	[2]	–	–	[2]	–	–	986	1,600,808
Totals, Ontario[1]	**27**	**21,157**	**4,262**	**11**	**8,626**	**878**	**27,098**	**27,684,630**
Manitoba—								
Totals for Province	**9**	**8,613**	**1,696**	**9**	**8,613**	**16,177**	**22**	**12,628**
British Columbia—								
Alert Bay	98	10,824	[2]	106	12,797	3,274	1,431	607,442
Britannia Beach	147	237,832	9,800	163	257,038	182,225	1,106	497,528
Nanaimo	853	442,894	[2]	822	417,925	88,054	3,610	1,508,709
New Westminster	552	1,699,622	24,847	535	1,717,022	862,569	2,316	2,150,298
Ocean Falls	55	70,971	41,609	55	106,216	49,673	1,008	687,939
Port Alberni	333	772,787	7	343	783,883	852,112	892	1,027,423
Powell River	178	264,612	7,335	223	273,028	165,769	2,252	1,191,308
Prince Rupert	2,189	219,759	13,257	2,245	243,330	21,375	3,655	862,827
Sidney	783	145,350	8,491	724	135,646	11,335	1,092	307,831
Union Bay	109	303,891	[2]	120	309,390	18,305	966	627,019
Vancouver	2,876	6,395,924	1,721,950	2,808	6,309,003	1,752,039	18,290	10,979,273
Victoria	3,425	4,757,322	43,885	3,603	4,786,766	298,647	6,387	7,120,232
Totals, Br. Columbia[1]	**12,714**	**16,377,499**	**1,883,871**	**12,923**	**16,439,710**	**4,885,942**	**45,608**	**29,027,221**
Yukon—								
Totals, Yukon	[2]	–	–	[2]	–	–	**150**	**96,373**
Grand Totals	**26,407**	**31,421,775**	**12,698,849**	**27,359**	**31,402,043**	**13,882,060**	**118,119**	**90,074,889**

[1] Totals include other smaller ports.

[2] None reported.

Grand Total Shipping Trade.—Statistics are given in Table **19** showing sea-going, inland international, coastwise, and total vessels (exclusive of ferriage), entered and cleared at Canadian ports, by provinces, during the fiscal year ended Mar. 31, 1938, and totals for the fiscal years 1929 to 1938. It is noteworthy that the volume of coastwise shipping is the greatest, while sea-going is next in tonnage. Both sea-going and coastwise shipping show marked expansion since 1923, although the effect of the depression is evident here also. Inland international shipping, on the other hand, has varied considerably and showed a more definite decrease during the depression. The ferry between Sarnia, Ontario, and Port Huron, Michigan, making 19,167 round trips with a cumulative registered tonnage of 2,148,656 tons in and the same out, was excluded for the first time in 1938. This ferry was displaced by a bridge in 1938-39.

19.—Numbers and Tonnages of All Vessels (Exclusive of Ferriage), Entered and Cleared at Canadian Ports, 1929-38, With Details by Provinces for the fiscal year 1938.

NOTE.—Totals for the years 1923-28 will be found at p. 702 of the 1938 Year Book.

Year and Province.	Sea-Going.				Coastwise.			
	Arrived.		Departed.		Arrived.		Departed.	
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.
Totals, 1929	**22,531**	**27,464,158**	**22,895**	**26,944,369**	**95,047**	**49,046,588**	**93,905**	**48,007,097**
Totals, 1930	**21,583**	**27,155,766**	**21,885**	**25,836,466**	**82,205**	**43,666,866**	**82,197**	**44,067,907**
Totals, 1931	**20,737**	**28,064,762**	**20,860**	**26,535,387**	**77,507**	**47,134,652**	**77,354**	**47,540,555**
Totals, 1932	**19,175**	**27,003,210**	**19,102**	**25,337,031**	**69,875**	**44,912,972**	**70,112**	**45,311,899**
Totals, 1933	**17,778**	**25,044,389**	**18,150**	**24,722,443**	**64,875**	**41,975,393**	**64,688**	**41,100,788**
Totals, 1934	**19,501**	**28,209,947**	**19,904**	**27,235,907**	**66,915**	**41,923,543**	**66,895**	**41,843,250**
Totals, 1935	**21,419**	**28,512,257**	**21,784**	**28,547,591**	**68,441**	**43,146,037**	**68,545**	**42,827,149**
Totals, 1936	**22,835**	**28,895,751**	**23,328**	**29,156,876**	**69,809**	**42,979,361**	**69,633**	**41,815,616**
Totals, 1937	**25,348**	**31,145,065**	**26,136**	**31,802,946**	**73,033**	**45,973,830**	**72,739**	**45,447,342**
1938.								
Prince Edward Island	67	38,637	80	35,755	945	287,632	941	290,584
Nova Scotia	5,524	5,660,509	6,200	5,936,780	12,265	4,757,699	12,084	4,528,354
New Brunswick	6,196	2,196,623	6,330	2,300,903	3,821	1,476,645	3,763	1,355,192
Quebec	1,870	7,118,737	1,806	6,671,656	12,899	10,584,413	13,036	10,870,358
Ontario	27	21,157	11	8,626	12,572	14,622,255	12,642	14,486,270
Manitoba	9	8,613	9	8,613	13	4,015	13	4,015
British Columbia	12,714	16,377,499	12,923	16,439,710	32,894	12,649,722	33,156	12,635,855
Yukon	Nil	-	Nil	-	128	89,453	126	89,151
Totals, 1938	**26,407**	**31,421,775**	**27,359**	**31,402,043**	**75,537**	**44,471,834**	**75,761**	**44,259,779**

Year and Province.	Inland International.				Totals.			
	Arrived.		Departed.		Arrived.		Departed.	
	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.	No.	Tons Register.
Totals, 1929[1]	**37,320**	**18,987,751**	**38,437**	**20,338,949**	**154,898**	**95,498,497**	**155,237**	**95,290,415**
Totals, 1930[1]	**54,742**	**17,550,585**	**55,600**	**18,895,972**	**158,530**	**88,373,217**	**159,682**	**88,800,345**
Totals, 1931[1]	**40,663**	**17,769,690**	**40,826**	**18,542,037**	**138,907**	**92,969,104**	**139,040**	**92,617,979**
Totals, 1932[1]	**35,264**	**15,216,213**	**35,768**	**15,879,943**	**124,314**	**87,132,395**	**124,982**	**86,528,873**
Totals, 1933[1]	**31,551**	**12,714,054**	**31,957**	**13,791,599**	**114,204**	**79,733,836**	**114,795**	**79,614,830**
Totals, 1934[1]	**28,328**	**12,718,566**	**28,660**	**14,460,952**	**114,744**	**82,852,056**	**115,459**	**83,540,109**
Totals, 1935[1]	**26,943**	**14,772,884**	**26,874**	**14,602,087**	**116,803**	**86,431,178**	**117,203**	**85,976,827**
Totals, 1936[1]	**29,548**	**14,472,022**	**29,425**	**14,998,858**	**122,192**	**86,347,134**	**122,386**	**85,971,350**
Totals, 1937[1]	**31,624**	**15,564,121**	**31,759**	**16,074,614**	**130,005**	**92,683,016**	**130,634**	**93,324,902**
1938.								
Prince Edward Island	Nil	-	Nil	-	1,012	326,269	1,021	326,339
Nova Scotia	"	-	"	-	17,789	10,418,208	18,284	10,465,134
New Brunswick	"	-	"	-	10,017	3,673,268	10,093	3,656,095
Quebec	1,654	1,133,142	1,677	1,282,091	16,423	18,836,292	16,519	18,824,105
Ontario[2]	14,499	13,041,218	14,259	13,075,157	27,098	27,684,630	26,912	27,570,053
Manitoba	Nil	-	Nil	-	22	12,628	22	12,628
British Columbia	"	-	"	-	45,608	29,027,221	46,079	29,075,565
Yukon	22	6,920	22	6,920	150	96,373	148	96,071
Totals, 1938[2]	**16,175**	**14,181,280**	**15,958**	**14,364,168**	**118,119**	**90,074,889**	**119,078**	**90,025,990**

---

[1] The Ontario figures and the totals for "Inland International" and "Total Shipping" are inclusive of ferriage at Sarnia amounting in each case of "Arrived" and "Departed" to: 13,180 vessels and 1,415,612 tons for 1934; 13,444 vessels and 1,433,031 tons for 1935; 14,583 vessels and 1,620,820 tons for 1936; and 15,217 vessels and 1,678,272 tons for 1937. Corresponding deductions for earlier years are not available.

[2] Ferry at Sarnia was discontinued in 1938. See footnote 1.

Subsection 2.—Canal Traffic.

Since the canals of Canada are open to the vessels and traffic of all nations upon equal terms, United States traffic constitutes an important part of the total carried through certain canals, especially the Welland Ship canal. This is shown in Tables **20** and **23**. More complete details of the traffic through canals may be found in the annual report on Canal Statistics published by the Dominion Bureau of Statistics.

20.—Traffic through Canadian Canals, by Nationality of Vessels and Origin of Freight, navigation seasons 1929-38.

NOTE.—Figures include duplications where cargoes use two or more canals. For Canadian canal traffic from 1886-99, see 1902 Year Book, p. 398; for the figures of 1900-10, the 1933 Year Book, p. 697; and for 1911-28, p. 703 of the 1938 edition.

Navigation Season.	Traffic.				Origin of Freight Carried.				
	Canadian Vessels.		United States Vessels.[1]		Canada.		United States.[1]		Total.
	No.	Registered Tonnage.	No.	Registered Tonnage.	Tons.	P.C. of Total.	Tons.	P.C. of Total.	Tons.
1929..	25,917	13,741,071	2,400	2,323,351	9,689,718	70·7	4,009,929	29·3	13,699,647
1930..	24,100	14,489,045	2,063	1,684,576	10,955,113	74·0	3,848,221	26·0	14,803,334
1931..	25,830	15,869,553	1,821	1,749,231	11,433,737	70·6	4,755,337	29·4	16,189,074
1932..	19,854	15,255,970	2,061	2,681,078	13,242,773	73·7	4,717,877	26·3	17,960,650
1933..	21,364	15,225,022	2,200	3,045,876	12,724,925	67·8	6,055,564	32·2	18,780,489
1934..	22,217	14,766,837	2,044	2,969,981	10,813,922	59·8	7,255,330	40·2	18,069,252
1935..	23,822	15,290,797	2,035	2,578,091	11,187,082	61·5	7,018,907	38·5	18,205,989
1936..	25,251	17,085,749	2,708	3,208,829	13,465,460	62·7	8,003,356	37·3	21,468,816
1937..	24,669	17,904,774	2,869	3,526,939	11,911,241	51·0	11,439,759	49·0	23,351,000
1938..	25,365	19,803,447	2,373	2,932,799	12,988,989	52·7	11,651,512	47·3	24,640,501

[1] Figures include a small percentage of vessels of other foreign countries.

21.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1937 and 1938.

NOTE.—Figures include duplications where cargoes use two or more canals.

Year and Canal.	Agricultural Products.	Animal Products.	Manufactures.	Forest Products.	Mineral Products.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.
1937.						
Sault Ste. Marie	1,014,698	950	303,566	107,041	393,674	1,819,929
Welland Ship	3,583,282	1,121	1,899,573	497,288	5,766,686	11,747,950
St. Lawrence River	3,558,640	6,044	1,808,625	736,577	3,085,553	9,195,439
Richelieu River	584	312	61,064	5,971	55,813	123,744
St. Peters	5,964	1,586	6,663	40,173	25,566	79,952
Murray	Nil	Nil	150	Nil	2,215	2,365
Ottawa River	229	60	125,840	5,312	217,637	349,078
Rideau	2	50	5,117	667	10,645	16,481
Trent	68	25	405	1,002	848	2,348
St. Andrews	Nil	3,391	54	7,913	2,356	13,714
Totals, 1937	**8,163,467**	**13,539**	**4,211,057**	**1,401,944**	**9,560,993**[1]	**23,351,000**

---

[1] Includes 1,588,377 tons of miscellaneous freight.

21.—Tonnage of Canal Traffic, by Canals and Classes of Products, navigation seasons 1937 and 1938—concluded.

Year and Canal.	Agricultural Products.	Animal Products.	Manu-factures.	Forest Products.	Mineral Products.	Total.
	tons.	tons.	tons.	tons.	tons.	tons.
1938.						
Sault Ste. Marie	1,452,727	281	246,410	132,504	436,434	2,268,356
Welland Ship	5,987,493	Nil	1,754,449	432,621	4,458,530	12,633,093
St. Lawrence River	4,734,585	2,706	1,631,943	616,475	2,250,609	9,236,318
Richelieu River	381	143	30,315	6,222	57,636	94,697
St. Peters	5,996	1,395	9,115	24,584	20,384	61,474
Murray	Nil	Nil	40	Nil	2,307	2,347
Ottawa River	"	"	104,287	633	194,773	299,693
Rideau	"	"	33	989	601	1,623
Trent	79	27	238	3,774	18,115	22,233
St. Andrews	Nil	1,589	10	12,088	6,980	20,667
Totals, 1938	**12,181,261**	**6,141**	**3,776,840**	**1,229,890**	**7,446,369**[1]	**24,640,501**

---

[1] Includes 1,392,426 tons of miscellaneous freight.

22.—Principal Commodities Carried through Canadian Canals, navigation seasons 1935-38.

Note.—Figures include duplications where cargoes use two or more canals.

Commodity.	1935.	1936.	1937.	1938.	Increase in 1938.	Decrease in 1938.
	tons.	tons.	tons.	tons.	tons.	tons.
Barley	396,659	494,500	755,081	1,308,679	553,598	-
Corn	346,094	381,248	1,823,211	3,902,598	2,079,387	-
Oats	315,340	317,507	258,269	343,740	85,471	-
Rye	179,326	112,487	245,119	179,995	-	65,124
Flaxseed	67,013	110,056	222,791	80,720	-	142,071
Wheat	4,089,058	5,444,009	4,119,942	5,474,382	1,354,440	-
Other grains	88,470	114,954	73,106	122,883	49,777	-
Flour	716,602	773,152	597,823	671,940	74,117	-
Hay	2,950	4,724	3,225	1,521	-	1,704
Other milled products	129,549	78,328	54,196	80,747	26,551	-
Fruits and vegetables	5,930	3,902	5,441	9,086	3,645	-
Potatoes	6,934	2,871	5,263	4,970	-	293
Poultry, game, and fish	4,276	5,024	6,105	3,106	-	2,999
Dressed meats	376	2,105	97	65	-	32
Other packing-house products	1,694	1,906	2,908	454	-	2,454
All other animal products	7,995	4,820	4,429	2,516	-	1,913
Agricultural implements	19,212	8,763	12,660	17,643	4,983	-
Cement, bricks, and lime	39,592	41,939	29,578	23,327	-	6,251
Iron, pig, and bloom	31,074	14,631	142,213	31,013	-	111,200
Iron and steel, all other	222,404	291,913	338,843	227,653	-	111,190
Gasoline	966,766	1,088,885	1,138,041	1,190,050	52,009	-
Petroleum and other oils	755,432	849,458	970,788	964,382	-	6,406
Sugar	322,167	308,308	256,485	304,345	47,860	-
Salt	78,040	74,127	102,767	124,402	21,635	-
Wines, liquors, and beer	19,941	16,161	15,447	14,145	-	1,302
Paper	387,400	406,828	515,668	379,491	-	136,177
Wood-pulp	780,090	799,192	606,836	445,549	-	161,287
Automobiles and parts	68,861	59,033	81,731	54,840	-	26,891
Pulpwood	1,124,916	1,388,154	1,331,699	1,154,710	-	176,989
Logs, posts, poles, piling	25,727	32,992	6,963	4,269	-	2,694
Firewood	16,273	6,685	5,810	16,062	10,252	-
Lumber mill and cooperage stock	47,432	60,707	55,779	51,801	-	3,978
Other forest products	5,898	7,245	1,693	3,048	1,355	-
Hard coal	446,367	380,910	266,193	357,301	91,108	-
Soft coal	3,714,568	4,339,090	5,617,723	4,200,872	-	1,416,851
Coke	295,329	406,142	336,733	232,882	-	103,851
Copper ore	8,693	12,559	5,061	11,511	6,450	-
Iron ore	657,995	863,632	1,077,709	642,253	-	435,456
Other ore	98,452	214,876	215,227	131,898	-	83,329
Sand, etc.	426,952	388,444	453,970	477,226	23,256	-
All other freight	1,288,142	1,556,549	1,588,377	1,392,426	-	195,951
Totals	**18,205,989**	**21,468,816**	**23,351,000**	**24,640,501**	-	-

23.—Canal Traffic, by Direction and Origin, navigation seasons 1937 and 1938.

NOTE.—Figures include duplications where cargoes use two or more canals.

Year and Canal.	From Canadian to Canadian Ports.		From Canadian to United States Ports.[1]		From United States to United States Ports.[1]		From United States to Canadian Ports.[1]	
	Up.	Down.	Up.	Down.	Up.	Down.	Up.	Down.
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.
1937.								
Sault Ste. Marie...	407,200	880,547	95,072	231,305	36,528	40,597	77,092	51,588
Welland Ship......	993,645	2,903,700	1,740,118	20,206	343,037	400,035	26,129	5,321,080
St. Lawrence River	3,144,516	2,832,391	1,555,911	55,949	67,148	41,335	12,841	1,485,348
Richelieu River...	30,334	2,046	66,651	Nil	Nil	Nil	Nil	24,713
St. Peters.........	14,193	65,359	Nil	300	"	"	100	Nil
Murray............	50	100	"	Nil	"	"	Nil	2.215
Ottawa River.....	162,354	145,222	"	41,023	"	"	479	Nil
Rideau............	13,745	2,736	"	Nil	"	"	Nil	"
Trent..............	1,653	695	"	"	"	"	"	"
St. Andrews.......	9,420	4,294	"	"	"	"	"	"
Totals, 1937...	**4,777,110**	**6,837,090**	**3.457,752**	**348,783**	**446,713**	**481,967**	**116,641**	**6,884,944**
1938.								
Sault Ste. Marie...								
Welland Ship......	376,632	1,262,737	26,926	246,637	28,162	36,639	155,840	134,783
St. Lawrence River	834,801	4,217,476	709,929	136,758	386,341	1,043,965	24,828	5,278,995
Richelieu River...	2,422,181	4,585,672	750,588	36,547	69,453	73,604	26,299	1,271,974
St. Peters.........	30,960	1,650	35,949	Nil	Nil	Nil	Nil	26,138
Murray............	16,741	44,733	Nil	"	"	"	"	Nil
Ottawa River.....	Nil	40	"	"	"	"	"	2,307
Rideau............	135,341	148,365	"	15,987	"	"	"	Nil
Trent..............	1,261	362	"	Nil	"	"	"	"
St. Andrews.......	3,807	18,426	"	"	"	"	"	"
	13,947	6,720	"	"	"	"	"	"
Totals, 1938...	**3,835,671**	**10,286,181**	**1,523,392**	**435,929**	**483,956**	**1,154,208**	**206,967**	**6,714,197**

Year and Canal.	Traffic by Direction.		Origins of Cargo.		Total Cargo.	Increase (+) or Decrease (−) on Previous Year.
	Up.	Down.	Canada.	United States.[1]		
	tons.	tons.	tons.	tons.	tons.	tons.
1937.						
Sault Ste. Marie............	615,892	1,204,037	1,548,049	271,880	1,819,929	−458,307
Welland Ship...............	3,102,929	8,645,021	4,210,760	7,537,190	11,747,950	+1,311,147
St. Lawrence River.........	4,780,416	4,415,023	5,604,202	3,591,237	9,195.439	+906,915
Richelieu River.............	96,985	26,759	99,031	24,713	123,744	+44,013
St. Peters....................	14,293	65,659	79,852	100	79,952	+23,695
Murray.......................	50	2,315	150	2,215	2,365	−2,541
Ottawa River...............	162,833	186,245	336,654	12,424	349,078	+87,585
Rideau.......................	13,745	2,736	16,481	Nil	16,481	+877
Trent.........................	1,653	695	2,348	"	2,348	−21,699
St. Andrews................	9,420	4,294	13,714	"	13,714	−9,501
Totals, 1937.........	**8,798,216**	**14,552,784**	**11,911,241**	**11,439,759**	**23,351,000**	**+1,882,184**
1938.						
Sault Ste. Marie............	587,560	1,680,796	1,890,467	377,889	2,268,356	+448,427
Welland Ship...............	1,955,899	10,677,194	4,928,707	7,704,386	12,633,093	+885,143
St. Lawrence River.........	3,268,521	5,967,797	5,697,806	3,538,512	9,236,318	+40,879
Richelieu River.............	66,909	27,788	68,559	26,138	94,697	−29,047
St. Peters....................	16,741	44,733	61,394	80	61,474	−18,478
Murray.......................	Nil	2,347	40	2,307	2,347	−18
Ottawa River...............	135,341	164,352	297,493	2,200	299,693	−49,385
Rideau.......................	1,261	362	1,623	Nil	1,623	−14,858
Trent.........................	3,807	18,426	22,233	"	22,233	+19,885
St. Andrews................	13,947	6,720	20,667	"	20,667	+6,953
Totals, 1938.........	**6,049,986**	**18,590,515**	**12,988,989**	**11,651,512**	**24,640,501**	**+1,289,501**

---

[1] Figures include a small percentage of ports of other foreign countries.

The canal traffic figures in Tables **20** to **23** include duplications where the same freight passes through two or more canals. Table **24** eliminates most of this duplication for the St. Lawrence-Great Lakes system. Even in this analysis, however, grain traffic originating at Lake Superior ports and transhipped from Upper Lake to smaller boats at Port Colborne or other points on lakes Erie or Huron, is really a duplication, although not appearing as such, and is shown separately as a deduction in the table. The elimination of duplications for Canadian canals only, is not feasible because both Canadian and United States vessels use the locks on both sides of the river at Sault Ste. Marie without the payment of tolls or other restrictions.

24.—Freight Traffic Using the St. Lawrence River, Welland Ship, and Sault Ste. Marie Canals, navigation season 1938.

NOTE.—Excluding duplications.

Canals Used.	Up-Bound Freight.	Down-Bound Freight.	Total.
	tons.	tons.	tons.
St. Lawrence River only	2,378,751	2,404,354	4,783,105
St. Lawrence River and Welland Ship	1,107,646	2,667,715	3,775,361
St. Lawrence River, Welland Ship, and Sault Ste. Marie[1]	145,249	913,794	1,059,043
Welland Ship only	573,959	4,808,668	5,382,627
Welland Ship, and Sault Ste. Marie[1]	127,240	2,284,783	2,412,023
Sault Ste. Marie[1] only	10,717,557	25,855,006	36,572,563
Totals	**15,050,402**	**38,934,320**	**53,984,722**
Deduct grain transhipped at Port Colborne, and Buffalo, Kingston, and Prescott	–	2,192,497	2,192,497
Totals	**15,050,402**	**36,741,823**	**51,792,225**

[1] Figures include both Canadian and United States canals at Sault Ste. Marie.

The Panama Canal.*—The Panama canal, which was opened to commercial traffic on Aug. 15, 1914, is a waterway which is destined to be of the greatest importance to the British Columbian ports, from which vessels now leave direct for Great Britain and European ports throughout the year. As an alternative route to that of the transcontinental railway lines, such a passage by water is of vital importance in the solution of the larger transportation problems of the continent, and while its influence is perhaps more potential than actual, such a check on transcontinental rail rates is a valuable one. During the War the great expectations based upon the opening of the canal were not realized, owing to the scarcity of shipping, but, with the post-War decline in ocean freight rates, an increase in traffic between Canada's Pacific ports and Europe has taken place, and, while the proportion carried in vessels of Canadian registry is comparatively small, the cargo tonnage has nevertheless assumed considerable proportions.

Table **25** shows the amount of traffic originating in or destined for Canada carried through the canal. The greater importance of the route as one from Pacific to Atlantic ports is illustrated by the much larger volume of freight originating at western ports than at eastern ports, and the larger volume destined for eastern than for western Canadian ports. Strictly inter-coastal Canadian cargo during the latest year aggregated 82,798 long tons as compared with 119,939 long tons in 1937.

With respect to total traffic through the canal by nationality of vessels and cargo carried, vessels of United States registration carried 9,892,619 tons, or 36·1 p.c. of the total cargo of 27,385,924 locked through in the fiscal year ended June 30, 1938. British vessels carried 6,417,016 tons, or 23·4 p.c.; Norwegian vessels 3,433,571 tons, or 12·5 p.c.; Japanese vessels 1,877,502 tons, or 6·9 p.c.; and German vessels 1,518,593 tons, or 5·5 p.c.

---

* Revised, and figures supplied, by courtesy of the Governor of the Panama Canal Zone.

25.—Traffic to and from the East and West Coasts of Canada via the Panama Canal, years ended June 30, 1929-38.

NOTE.—Figures for the years 1921-28 are given at p. 707 of the 1938 Year Book.

Year ended June 30—	Originating on—		Destined for—	
	Canada, West Coast.	Canada, East Coast.	Canada, West Coast.	Canada, East Coast.
	long tons.	long tons.	long tons.	long tons.
1929	2,650,646	231,128	266,433	539,767
1930	1,968,966	185,776	267,282	556,562
1931	2,307,257	137,756	271,621	492,532
1932	2,383,211	89,443	167,855	529,317
1933	2,896,162	121,875	134,511	328,038
1934	2,201,180	196,204	189,227	498,706
1935	2,490,203	248,658	176,698	547,974
1936	2,705,567	298,884	223,174	506,673
1937	2,780,243	379,783	240,221	589,011
1938	1,962,220	391,906	213,781	398,710

26.—Summary of Commercial Traffic through the Panama Canal, years ended June 30, 1929-38.

NOTE.—Figures for the years 1915-28 are given at p. 708 of the 1938 Year Book.

Year ended June 30—	Atlantic to Pacific.		Pacific to Atlantic.		Totals.	
	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.	Vessels.	Cargo Tonnage.
	No.	long tons.	No.	long tons.	No.	long tons.
1929	3,279	9,873,529	3,010	20,774,239	6,289	30,647,768
1930	3,051	9,472,061	2,976	20,546,368	6,027	30,018,429
1931	2,717	6,670,718	2,653	18,394,565	5,370	25,065,283
1932	2,273	5,631,717	2,089	14,167,269	4,362	19,798,986
1933	2,184	4,507,070	1,978	13,654,095	4,162	18,161,165
1934	2,753	6,162,649	2,481	18,541,360	5,234	24,704,009
1935	2,676	7,529,721	2,504	17,779,806	5,180	25,309,527
1936	2,770	8,249,899	2,612	18,256,044	5,382	26,505,943
1937	2,865	9,895,632	2,522	18,212,743	5,387	28,108,375
1938	2,946	9,688,560	2,578	17,697,364	5,524	27,385,924

Subsection 3.—Harbour Traffic.

The freight movement through a large port takes a number of different forms. The overseas movement, *i.e.*, the freight loaded into or unloaded from sea-going vessels, frequently constitutes a surprisingly small part of the total. Usually the volume coming in and going out by coastwise vessels is larger. Then there is the 'in transit' movement in vessels which pass through the harbour without loading or unloading. Finally there is the movement from one point to another within the harbour, which in many ports amounts to a large volume. It is not possible to obtain statistics of the total freight handled in all the ports and harbours of Canada, as many of them are small, and without the staff necessary to obtain a detailed record of freight handled. However, the cargo of sea-going vessels loaded and unloaded is shown for the principal ports, for the provinces and for Canada, in Table **18**. Similar statistics of cargo carried by vessels in coastwise and inland international shipping are not available. The National Harbours Board now reports annually the water-borne cargo loaded and unloaded at the eight ports under its control. Six of these are among the principal ports of Canada and the cargo handled in each is shown in Table **27**. The classification is the same as for railway freight (Table **23**, pp. 652-653) and canal traffic (Table **22**, p. 696). The figures include freight carried by coastwise and inland international, as well as by sea-going shipping. The total of sea-going cargo is shown for these same ports in Table **18**, and the difference would be largely coastwise for these particular ports. The figures for each port include all cargo loaded or unloaded whether by facilities under the Board or at private docks and terminals in these ports. Cross-harbour movements and bunkering are excluded except as mentioned in the footnote to the table.

27.—Principal Commodities in Water-Borne Cargo Landed from and Loaded to Vessels at Six Principal Ports in Canada during the calendar year 1938, with Grand Totals, 1934-38.

Commodity.	Halifax.		Saint John.		Quebec.	
	Inward.	Outward.	Inward.	Outward.	Inward.	Outward.
	tons.	tons.	tons.	tons.	tons.	tons.
Agricultural Products.						
Wheat	8	2,823	Nil	178,492	54,329	15,118
Corn	24,016	240	12,636	19,854	48,222	85,726
Oats	797	2,030	Nil	1,996	5,192	1,273
Barley	4	316	"	25,825	14,017	8,827
Rye	Nil	Nil	"	3,465	Nil	Nil
Other grain	731	36	28	Nil	425	574
Flour	6,005	59,874	256	59,176	11,489	4,237
Other milled products	1,435	15,067	1,062	25,613	357	475
Fresh fruit	17,466	98,651	26.740	2,342	1,479	741
Fresh vegetables (including potatoes)	4,834	20,992	1,888	25,429	2,323	746
Totals, Agricultural Products[1]	**102,764**	**208,621**	**81,985**	**347,917**	**141,906**	**119,468**
Animal Products.						
Dressed meats	1,043	15,975	719	31,825	197	557
Cheese	113	1,089	109	350	146	1,173
Wool	2,949	35	3,492	581	Nil	Nil
Totals, Animal Products[1]	**8,645**	**27,527**	**6,906**	**54,580**	**3,086**	**2,882**
Mine Products.						
Anthracite coal	71,575	Nil	70,795	Nil	144,374	1,916
Bituminous coal	82,286	663	119,783	1,342	533,352	303
Iron ore	11	Nil	7,840	Nil	54	6,772
Other ores and concentrates	3,921	6,540	2,850	1,825	111	10.146
Non-ferrous metals	1,673	47,843	1,692	59,354	Nil	309
Sand, gravel, and stone	497	5	1,403	672	486	43
Crude petroleum	589,799	17,196	Nil	Nil	141,186	2,609
Salt	9,346	830	3,719	35	7,054	1,098
Totals, Mine Products[1]	**764,956**	**73,340**	**238,329**	**81,345**	**839,506**	**90,209**
Forest Products.						
Logs, poles, etc	15	1,401	Nil	10,471	81	1,510
Firewood	Nil	Nil	"	Nil	2,939	180
Pulpwood	882	5,267	"	189,193	40,598	138,369
Lumber, timber, etc	1,758	81,655	9,718	118,362	33,914	9,656
Totals, Forest Products[1]	**20,252**	**90,815**	**10,567**	**319,200**	**77,932**	**151,106**
Manufactures and Miscellaneous.						
Gasoline	48,630	211,454	71,148	10,929	65,638	1,086
Other petroleum products	356	5,464	23,639	724	918	144
Sugar	65,431	11,530	89,692	17,921	8,904	104
Iron (bar, sheet, structural, pipe, etc.)	2,348	4,780	5,482	8,236	3,331	4,514
Cement	22,988	810	107	43	41,195	502
Motor vehicles and parts	654	38,595	2,409	88,820	74	115
Fertilizers	7,325	2,998	40,000	2,378	12,584	994
Newsprint paper	4,029	45,596	Nil	94,935	Nil	87,561
Paper board	119	10,101	108	19.800	141	1,866
Wood-pulp	Nil	5,651	Nil	24,726	Nil	Nil
Fish, fresh, cured, etc	52,712	42,646	646	3,904	1,733	108
Canned goods (except meats)	3,484	12,601	1,705	5,281	3,378	627
Totals, Manufactures, etc.[1]	**275,305**	**482,286**	**370,125**	**422,571**	**184,894**	**131,742**
Grand Totals, 1938	**1,171,922**	**882,589**	**707,912**	**1,225,613**	**1,247,324**	**495,407**
Grand Totals, 1937	**1,334,412**	**1,041,797**	**773,742**	**1,244,670**	**1,228,534**	**456,857**
Grand Totals, 1936	**1,260,100**	**880,358**	**704,528**	**1,019,833**	**1,315,319**	**540,823**
Grand Totals, 1935	**1,212,386**[2]	**983,443**[2]	**620,303**	**808,412**	**1,188,774**	**451,113**
Grand Totals, 1934	**1,089,934**[2]	**1,006,271**[2]	**633,042**	**832,782**	[3]	[3]

---

[1] Totals include other less important commodities not specified. [2] Includes cross-harbour movements and bunkering, excluded in later years. [3] Not available.

27.—Principal Commodities in Water-Borne Cargo Landed from and Loaded to Vessels at Six Principal Ports in Canada during the calendar year 1938, with Grand Totals, 1934-38—concluded.

Commodity.	Three Rivers.		Montreal.		Vancouver.	
	Inward.	Outward.	Inward.	Outward.	Inward.	Outward.
	tons.	tons.	tons.	tons.	tons.	tons.
Agricultural Products.						
Wheat	221,395	208,262	1,397,265	1,456,752	Nil	576,562
Corn	403,305	405,662	524,275	628,810	7,477	Nil
Oats	1,373	1,118	88,197	75,206	32	33,359
Barley	124,617	129,222	310,744	304,312	Nil	51,885
Rye	6,367	6,367	52,604	66,274	“	Nil
Other grain	25,348	34,010	55,536	42,780	8,432	499
Flour	Nil	Nil	34,045	200,075	1,334	32,501
Other milled products	“	162	6,609	114,905	3,976	13,634
Fresh fruit	35	Nil	35,504	59,336	15,725	13,060
Fresh vegetables (including potatoes)	Nil	88	3,277	1,509	7,083	7,638
Totals, Agricultural Products[1]	**782,440**	**785,516**	**2,655,410**	**3,030,386**	**103,599**	**731,485**
Animal Products.						
Dressed meats	Nil	Nil	3,549	70,936	1,772	590
Cheese	“	“	518	40,543	194	31
Wool	“	“	6,955	1,067	2,105	137
Totals, Animal Products[1]	**Nil**	**Nil**	**28,741**	**164,036**	**35,713**	**18,267**
Mine Products.						
Anthracite coal	18,349	Nil	1,428,641	253,185	657	Nil
Bituminous coal	272,922	“	1,947,550	166,591	271,419	2,191
Iron ore	Nil	“	72,745	72,738	Nil	Nil
Other ores and concentrates	“	“	20,259	11,596	2,911	57,886
Non-ferrous metals	“	“	3,497	206,270	46	26,649
Sand, gravel, and stone	1,003	“	43,866	1,321	267,086	74,753
Crude petroleum	Nil	“	2,388,528	235,678	959,913	126,959
Salt	9,899	“	16,357	4,425	19,481	2,293
Totals, Mine Products[1]	**333,867**	**Nil**	**6,006,284**	**990,848**	**1,525,165**	**314,060**
Forest Products.						
Logs, poles, etc	Nil	Nil	Nil	Nil	1,087,813	361,889
Firewood	534	“	“	“	2,472	97,873
Pulpwood	700,862	“	“	“	Nil	Nil
Lumber, timber, etc	2,372	2,576	51,480	82,768	370,915	453,198
Totals, Forest Products[1]	**703,768**	**2,576**	**69,863**	**90,128**	**1,464,134**	**940,301**
Manufactures and Miscellaneous.						
Gasoline	16,196	Nil	285,958	732,635	43,959	126,976
Other petroleum products	30,238	“	80,026	593,356	25,047	1,160
Sugar	Nil	“	287,602	67,986	90,016	5
Iron (bar, sheet, structural, pipe, etc.)	32	“	33,229	63,710	50,966	28,306
Cement	Nil	“	4,965	102,727	32,360	956
Motor vehicles and parts	“	“	1,502	80,503	3,225	26,726
Fertilizers	5,400	“	17,512	12,835	18,493	14,897
Newsprint paper	Nil	158,736	19	49,037	34,820	14,903
Paper board	“	68	840	26,367	1,503	1,016
Wood-pulp	“	112	180,777	197,743	7,653	7,084
Fish, fresh, cured, etc	“	Nil	1,833	1,431	63,566	57,544
Canned goods (except meats)	“	“	34,385	68,745	12,457	5,491
Totals, Manufactures, etc.[1]	**80,274**	**173,104**	**1,300,660**	**2,364,028**	**668,001**	**555,429**
Grand Totals, 1938	**1,900,349**	**961,196**	**10,060,958**	**6,639,426**	**3,796,612**	**2,559,542**
Grand Totals, 1937	**1,956,401**	**739,635**	**10,073,523**	**6,296,111**	**4,176,003**	**2,736,120**
Grand Totals, 1936	**1,210,773**	**383,851**	**9,697,737**	**5,840,975**	**3,879,919**	**3,886,195**
Grand Totals, 1935	**954,729**	**175,509**	**8,951,344**	**4,896,156**	**3,205,188**	**3,134,448**
Grand Totals, 1934	**879,261**	**164,477**	[2]	[2]	**3,056,068**	**3,203,513**

---

[1] Totals include other less important commodities not specified. [2] Not available.

PART V.—AIR NAVIGATION.*

Aircraft furnish a rapid and convenient means of transportation for passengers and supplies in remote and unsettled areas where transportation otherwise is slow and very costly. Similarly, aircraft have provided a relatively cheap and feasible means of obtaining information for the development and conservation of natural resources in many parts of Canada where the cost by other means would be prohibitive. Air-mail and air-transportation lines and commercial services are increasing steadily in number and in the scope of their operations and usefulness.

The treatment of air navigation in this Part of the Year Book is confined to civil aviation; the military activities and organizations are dealt with under National Defence (see "Air Service" in the Index). The subject is introduced with a section dealing with the history and administrative control of civil aviation and this is followed by sections on facilities and equipment, finances and employees, and traffic, along the lines of the treatment adopted in this chapter for other forms of transportation.

The collection and compilation of statistics of civil aviation was transferred from the Branch of the Controller of Civil Aviation to the Bureau of Statistics in 1936. To preserve continuity with aviation statistics published in previous Year Books, a statistical summary of civil aviation for the years 1932 to 1937 is given below in Table **1**. The statistics collected since 1936 have been somewhat enlarged and consequently no comparisons with similar data for previous years can be made for items appearing in other tables of this Part.

---

* Descriptive and administrative information has been prepared from material supplied by J. A. Wilson, Controller of Civil Aviation, Department of Transport, while statistics have been compiled by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics.

1.—Summary Statistics of Civil Aviation in Canada, calendar years 1932-37.

NOTE.—Figures for 1921-23 may be found at p. 616 of the 1924 edition of the Year Book, for 1924-29 at p. 661 of the 1930 edition, and for 1930 and 1931 at p. 698 of the 1936 Year Book.

Item.	1932.	1933.	1934.	1935.	1936.	1937.
General Analysis.						
Firms manufacturing aircraft........No.	7	7	6	10	7	9
Firms chiefly operating aircraft..... "	73	87	125	123	116	162
Firms using aircraft as auxiliary service.......................... "	4	3	3	7	12	10
Aircraft flights made............... "	102,219	106,252	128,031	153,211	160,014	190,403[1]
Aircraft hours flown................ "	56,170	53,299	75,871	88,451	101,953	126,896[1]
Total aircraft mileage flown......... "	4,569,131	4,538,315	6,497,637	7,522,102	7,803,942	10,755,524[1]
Average flight duration.............min.	33	30	36	34	38	40[1]
Pilots carried.......................No.	102,219	106,252	128,031	153,211[1]	160,014[1]	190,403[1]
Passengers and crew carried......... "	76,800	85,006	105,306	177,472[1]	127,937[1]	168,652[1]
Total personnel carried.............. "	179,019	191,258	233,337	330,683[1]	287,951[1]	359,055[1]
Pilots carried one mile (pilot miles) "	4,569,131	4,538,315	6,497,637	7,522,102	7,803,942[1]	10,755,524[1]
Passengers and crew carried one mile (passenger miles)........... "	2,869,799	3,816,862	6,266,475	7,936,950	12,055,684	17,695,591[1]
Total personnel carried one mile (personnel miles) .... "	7,438,930	8,355,177	12,764,112	15,459,052	19,859,626	28,451,115[1]
Total freight or express carried..... lb.	3,129,974	4,205,901	14,441,179	17,615,910	25,387,719	26,279,156[1]
Total mail carried (postal contracts) "	413,687	539,358	625,040	1,126,084	1,161,069	1,450,473[2]
Licensed Civil Air Harbours.						
Air harbours (all types)...........No.	83	90	101	96	155	158

For footnotes, see end of table, p. 703.

1.—Summary Statistics of Civil Aviation in Canada, calendar years 1932-37—concluded.

Item.		1932.	1933.	1934.	1935.	1936.	1937.
Licensed Civil Aircraft.[3]							
Total Aircraft (all types)—							
Gross Weight—							
Up to 2,000 lb.	No.	416	331	[4]	[4]	[4]	316
2,001- 4,000 lb.	"	[4]	1	[4]	[4]	[4]	132
4,001-10,000 lb.	"	1	[4]	[4]	[4]	[4]	147
Over 10,000 lb.	"	[4]	[4]	[4]	[4]	5	9
Type—							
Sea boats	No.	416	331	[4]	[4]	[4]	32
Amphibians	"	26	12	[4]	[4]	[4]	1
Land planes	"	2	1	[4]	[4]	[4]	322
Convertible	"	445	345	368	380	450	249
Licensed Civil Air Personnel.							
Commercial pilots	No.	[5]	474	405	414	380	320
Limited commercial pilots	"	[6]	[6]	[6]	[6]	65	129
Transport pilots	"	[6]	[6]	[6]	[6]	42	73
Private pilots	"	[5]	405	429	496	559	625
Air engineers	"	[5]	403	461	472	533	595

---

[1] Revised since publication of the 1938 Year Book. [2] Under postal contract 1,323,584 lb. [3] Details of licensed aircraft for 1937 are given in Table 3. [4] No information reported. [5] The basis of classification was changed in 1935 and is now shown from 1933 onward. Figures on the old basis for 1929-34 will be found at p. 746 of the 1934-35 edition of the Year Book. [6] This class did not exist prior to 1936.

Section 1.—History and Administration.

Subsection 1.—Development of Aviation in Canada.

Historical Sketch.—A brief historical outline of the development of aviation in Canada appeared at pp. 710-712 of the 1938 Year Book.

THE TRANS-CANADA AIRWAY.

Modern Airway Facilities.—The term 'airway' may be defined as the path of flight between two terminal airports on which have been installed permanent aids to air navigation. In North America a standard system of aids to air navigation has gradually been evolved. This is being closely adhered to in the construction and equipment of the Trans-Canada airway, and some of the most important characteristics should be mentioned. Efficient weather and radio services are essential features. Terminal airports, *i.e.*, those where regular stops are made, should be all-way and all-weather fields, having three or more hard-surfaced runways, at least 3,000 feet in length, fully lighted with electric airway beacons, floodlights, boundary lighting systems to define the runways, range and approach lights to indicate the path of flight to the paved landing strips, and obstruction lights to define obstacles that might interfere with the clear approach to the airport. At a distance of about three miles there should be a radio-beam station, by means of which the pilot is guided along the airway and brought directly over the airport at the proper altitude for landing.

A meteorological service is essential on every main airport. By means of two-way radio, aeroplanes in flight are given, every thirty minutes, the latest information on the weather, are controlled during their flight, given full information as to other aeroplanes flying in their vicinity, and advised when to land.

Present practice requires radio-beam and two-way communication stations along the airway at intervals of about 100 miles between the terminal airports.

Adjacent to these and directly in the path of flight secondary aerodromes are constructed. These are not necessarily stopping points but they afford a safe landing in case of need. The number of additional intermediate aerodromes considered necessary for safety varies with the type of country. In open, settled, farm lands, where there are no mountains and where the weather is normally fine, they may be dispensed with altogether or spaced at intervals of about 50 miles between the major airports. Owing to the nature of the climate and the difficult physical character of the terrain in the Rocky Mountain region and northern Ontario, where there are absolutely no alternative emergency landing places, the spacing averages about 30 miles. The Trans-Canada airway when finally completed will consist of a chain of airports from 30 to 50 miles apart reaching from Moncton to Vancouver. All important communities in Canada not on the line of the Trans-Canada airway will be connected with it by branches and arrangements for exchange of international traffic with the airway system of the United States at cities near the border are being perfected.

Construction.—Natural conditions divide the Trans-Canada airway into four distinct regions—the Mountain region, from the Pacific coast to the foothills in Alberta; the Prairie region, stretching from the foothills to the Ontario boundary; the Laurentian area, extending through western Ontario as far as the Ottawa valley; and the Atlantic section, which takes in the settled areas in the basin of the Great Lakes, the Eastern Townships of Quebec, and the Maritimes.

The Prairie region obviously presented the simplest construction and operating problems. There, precipitation is light, visibility normally good, contour changes are gradual, and aerodrome sites requiring little development were obtainable everywhere. Airway surveys commenced on the prairie section in the summer of 1928, and aerodrome construction and lighting installation followed. By the end of 1929, a chain of lighted aerodromes from Winnipeg to Edmonton *via* Regina and Calgary had been prepared and a contract for the carriage of mails had been let to Canadian airways by the Post Office Department. Actual flying operations started on Mar. 1, 1930, with the operation of a nightly service each way. Five radio-beam stations, constructed in 1931, increased the efficiency of the airway materially. This service continued in regular operation with satisfactory results till Mar. 31, 1932, when, for reasons of economy in all services, it was temporarily suspended. Although the operation of the trans-prairie service was stopped, the airway surveys then in hand in the mountains and in northern Ontario, Quebec, and the Maritime Provinces were continued with a view to the eventual completion of the system from coast to coast.

The necessity for finding useful employment for many single homeless men in all parts of the country led to the establishment of aerodrome construction camps on the Rocky Mountain section, and in northern Ontario, Quebec, and the Maritime Provinces. These resulted in much valuable work being performed, and the system was continued to June 30, 1936, when all labour camps were shut down and the construction work was continued either by contract or by day labour.

An Act creating a national operating company—Trans-Canada Air Lines—for the operation of the Trans-Canada system was passed by Parliament in 1937, and in July and August of that year a joint survey was made by the staff of the operating company and the Department of Transport to decide on the air navigation facilities required to complete the airway. The increase in landing speed and the introduction of night and all-weather flying necessitated larger airports with longer clear approaches and improved surfaces. Facilities which had been adequate five years before no longer sufficed. The construction and installation of the necessary radio-range stations, the enlargement of the airports, and installation of the airway lighting system was put in hand in September, 1937, and has been prosecuted with energy since that date. Work was further advanced in the Western section; activities were concentrated there to bring it into operation as soon as possible. In the meantime, the Trans-Canada Air Lines were organizing and training their flying and ground crews, obtaining the necessary aircraft, and building hangars and workshops essential for the operation of the airway.

Operations.—On Jan. 1, 1938, all this work was far enough advanced to enable experimental flying on a daylight schedule between Vancouver and Winnipeg to commence. The results of these experimental flights proved so satisfactory that, on Mar. 4, a beginning was made in carrying mails experimentally between Vancouver and Winnipeg. By Oct. 1 the erection of the remaining radio stations and the installation of teletype, two-way wireless service, meteorological service, the improvement of the airports, and lighting of the route for night operations was completed and a regular air-mail service was formally inaugurated on that date over this portion of the route. The northern connection to Edmonton from Lethbridge was also opened at the same time, though until the new and larger airport at Calgary is finished no stop can be made there.

The erection of the wireless stations between Winnipeg and Montreal was, in the meantime, proceeding rapidly. The completion of the airports and the installation of the lighting was commenced as soon as weather conditions permitted in northern Ontario. Delivery of the ten "Lockheed 14" aircraft purchased for the operation of the main line was completed during September, and the construction work was so well advanced that regular daily flights on schedule were inaugurated for the training of personnel, both flying and ground, on this section of the route on Sept. 10. An express service between Montreal, Toronto, and Vancouver was inaugurated on Oct. 17. By Dec. 1 the construction and equipment of the airway was sufficiently far advanced to justify the inauguration of a daily air-mail service between Montreal and Vancouver and this commenced on that date. Experience in flying operations over the airway showed that additional radio-range stations were required at certain points in the Rocky mountains and elsewhere to give adequate security under adverse conditions. Four additional ranges were constructed and brought into operation early in 1939.

There are now thirty radio-range stations in operation on the route at roughly hundred-mile intervals, though in the mountains the spacing is closer. Adjacent to most of them is an airport fully lighted for night flying where meteorological observations are made and relayed to planes in flight and to the central forecasting stations at Vancouver, Lethbridge, Edmonton, Winnipeg, Kapuskasing, Toronto, and Montreal. At these stations a weather map is prepared four times daily and district forecasts are issued for the ensuing six hours.

Construction work east of Montreal has also been prosecuted with energy. At the main base for the Maritime Provinces at Moncton, N.B., a major airport is under construction, and a contract has been let for the erection of the radio-range station. The intermediate field at Blissville, N.B., is now completed and the radio-range station is under construction. At Megantic, major improvements at the airport have been undertaken, all with a view to making possible regular operations between Moncton and Montreal by the autumn of 1939.

TRANSATLANTIC AIR SERVICE.

The past decade has witnessed the creation of a world-wide system of communications by air. European air lines cover that continent with a network connecting all the principal centres and stretching out to the farthest confines of Africa, Asia, and Australasia. In North America, the United States airway system provides a similar network and has been extended to give rapid means of transportation to all points in Central and South America. The Pacific ocean has been spanned and South America connected with Europe. The only major trade route not yet regularly served by aircraft is the North Atlantic. This trade route is perhaps the most important in the world. It joins the greatest centres of population and industry of the Old and New Worlds. It is served by the most highly efficient transport and communication systems in the world and here, if anywhere, is to be found traffic of sufficient value and quantity to justify the establishment of a commercial air service. The great circle track, or shortest route joining these two great industrial districts, passes down the Rhine valley, through northern France and Belgium, London, Northern Ireland, the Straits of Belle Isle, Montreal, the valley of the St. Lawrence and thence to the Mississippi basin. The eastern and western terminals of the direct transatlantic airway lie in the British Commonwealth and from the earliest days of aviation the Canadian Government has watched its development with growing interest. The length of the ocean crossing and the climatic difficulties have delayed the establishment of any regular service by this route, but, with the advance of aeronautical and radio science and meteorological services, these are being conquered.

At the invitation of the Government of Newfoundland, representatives of the Canadian and United Kingdom Governments visited St. John's, Newfoundland, in July, 1933, for a conference on transatlantic flying. This conference was also attended by representatives of Imperial Airways and Pan American Airways. The result of this conference was close co-operation between the three Governments in certain preliminary surveys and meteorological studies.

An agreement for co-operation in the establishment of the transatlantic air service by the Governments of Canada, the United Kingdom, the Irish Free State, and Newfoundland was reached by representatives of these Governments in Ottawa in December, 1935. Since the friendly co-operation of United States interests, rather than the institution of a rival service, was highly desirable, at the close of the Ottawa Conference in December, 1935, the representatives of the Commonwealth Governments proceeded to Washington and an agreement was reached with representatives of the United States Government for their co-operation in the institution of a regular transatlantic air-mail, passenger, and express service. The practical results of these two conferences were the trial flights made by aircraft of Imperial Airways and Pan American Airways during the summer of 1937. Flying boats were used by both companies. Imperial Airways operated two of the new 'Empire' type, high wing monoplane boats, while Pan American Airways used the 'Clipper' flying boat, a type which had been successfully flown on their transpacific service. The success of these trial flights inspires confidence that, in a relatively short time, commercial transatlantic services will be in operation.

In 1938 there was little activity on the transatlantic air service owing to the necessity of building new flying boats embodying the lessons learned during the 1937 operations. Delivery of the new types, both British and American, has been made and regular air operations are planned for the near future.

The only transatlantic flight made by the northern route during the year was made by the *Mercury*, the upper component of the interesting Short-Mayo composite aircraft. This seaplane, carrying 1,000 lb. of express matter, was launched by her mother ship the *Maia* near Foynes at 20:00 hrs. (B.S.T.) July 21 and proceeded non-stop to Montreal landing at 16:20 hrs. (B.S.T.) July 22, refuelling there and going on to New York. The *Mercury* made the return flight by easy stages *via* Montreal, Botwood, the Azores, and Lisbon to Southampton.

Canada's share in the trial flights has been confined so far to the provision of seaplane bases, meteorological and radio services in Canada and, as regards the two services last named, in Newfoundland as well. Under the Ottawa Agreement, when the trial flights justify the establishment of a regular service, a joint operating company will be formed by Imperial Airways, Trans-Canada Air Lines, and a company nominated by the Irish Free State for the permanent operation of the route. Negotiations are now proceeding between the three companies for the establishment at an early date of such a joint operating company.

Subsection 2.—Administration.

Civil aviation, previously administered by the Department of National Defence, is now a function of the Department of Transport, created in November, 1936.

In 1938, Parliament passed the Transport Act (c. 53 of the Statutes) enlarging the jurisdiction of the former Board of Railway Commissioners to include the regulation of air transport and certain classes of water transport. The Board of Transport Commissioners is co-operating with the Civil Aviation Branch in the regulation of air services so as to stabilize the industry by preventing destructive competition, and to ensure a higher standard of safety and efficiency in the operation of all regular air services in the Dominion.

The administrative duties under the Controller of Civil Aviation include the inspection and registration of aircraft and air harbours, the licensing of commercial and private air pilots, air engineers, and air navigators. In addition to these duties, the location and construction of air routes and any matters connected with airship services are administered by this Branch.

To encourage and stimulate a keener and more widespread interest in and knowledge of aviation, the Department of National Defence, since 1928, has assisted by issuing light aeroplanes and making grants to each of the 22 flying clubs, *viz.*: Halifax, Cape Breton, Saint John, Montreal, Brant-Norfolk, Fort William, Hamilton, Kingston, London, Ottawa, St. Catharines, Toronto, Border Cities, Kitchener, Brandon, Winnipeg, Moose Jaw, Regina, Saskatoon, Calgary, Edmonton, and Vancouver. Many aerodromes have been established through this movement. Details of membership, aircraft, hangars, flights, etc., of flying clubs are shown separately in the tables.

Royal Canadian Mounted Police.—Since the Royal Canadian Mounted Police took over the duties of the Preventive Service in 1932, aircraft have been utilized in the work on a wide scale. During 1938 such operations were carried out along the Atlantic seaboard and the lower gulf of St. Lawrence by three DeHavilland Dragonfly land planes based at Moncton, N.B. Operations commenced on May 19 and continued until Nov. 23, during which time 229 separate patrols were carried out involving a total of 736 flying hours. The bulk of these patrols were made in connection with Preventive Service work and information was relayed to the radio station at Shediac, N.B., concerning movements of suspected vessels off-shore. Contact was also maintained with R.C.M.P. cruisers and patrol boats by means of "dropped messages". The Aviation Section proved very helpful to the Preventive

Service and the fact that these planes were on patrol had a great moral effect upon the rum-runners. During the season these planes were called upon to assist in locating missing vessels and crews and on two occasions were successful in locating the missing craft.

Provincial Government Operations.—The Ontario Provincial Air Service owns 28 aircraft, which are operated by the province in the work of forest fire protection, transportation, and air photography in northern Ontario. The Manitoba Government Air Service operated, in 1938, 4 aircraft on forest protection in the province for the Forestry Branch. The Department of Lands and Mines of New Brunswick also operated one aircraft during 1938. Work requiring the use of aircraft was carried out in other provinces by commercial operators on contract with the Provincial Governments concerned.

Commercial Aviation.—During 1938 the principal activity of commercial aircraft operators in Canada was the carriage by air of passengers, freight, and mails to mining fields in the more remote parts of the Dominion. Their work also included forest fire patrols, timber cruising, air photography, flying instruction, advertising, short passenger flights, etc., in various parts of the country.

Air-Mail Services.—Regular air-mail services were established in December, 1927. Statistics of the air-mail services, showing routes operated, mileage flown, and mail carried during the fiscal year ended Mar. 31, 1937, may be found in Table 6, p. 736, under the Part of this chapter dealing with the Post Office.

Section 2.—Airports and Aircraft.

Subsection 1.—Ground Facilities.

The nucleus of the chain of aerodromes and ground facilities mentioned below, which will constitute the trans-Canada airway, consists of municipal or flying-club airports adjacent to the larger urban centres. There are also numerous terminals from which commercial flying services operate, chiefly into the northerly mining regions. These different types of air harbours are indicated in Table 2.

A large air terminal has been built at St. Hubert, seven miles south of Montreal. Immigration, customs, and postal facilities are available. An aerodrome has also been constructed at Rimouski to expedite the dispatch and reception of trans-atlantic mails.

2.—Air Harbours in Canada, 1937.

Note.—Dashes in this table indicate that no information is available under those heads.

MUNICIPAL AIR HARBOURS.

Location.	Name of Aeroplane Club Using Harbour.	Landing Surface.	Capacity of Hangar.	Invest-ment.[1]
			sq. ft.	$
Prince Edward Island—				
Summerside	(none)	Land and water	-	9,552
Nova Scotia—				
Halifax	Halifax Aero Club	Land	2,400	1,300
New Brunswick—				
Fredericton	(none)	Water	-	-
Moncton	(none)	Land	4,881	23,830
Saint John	Saint John Flying Club	Land	5,200	314,709
Quebec—				
Cap de la Madeleine	(none)	Land	-	-

[1] Not included in investments shown in Table 4.

2.—Air Harbours in Canada, 1937—concluded.

MUNICIPAL AIR HARBOURS—concluded.

Location.	Name of Aeroplane Club Using Harbour.	Landing Surface.	Capacity of Hangar.	Investment.[1]
			sq. ft.	$
Ontario—				
Brantford	Brant-Norfolk Aero Club	Land	1,300	6,650
Fort William	Fort William Aero Club	Land	2,400	975
Haileybury	(none)	Water	-	-
Hamilton	Hamilton Aero Club	Land	5,700	-
Kingston	Flying Club of Kingston	Land	7,500	3,500
Little Current	(none)	Land and water	-	75
Port Arthur	(none)	Water	-	3,200
Stratford	(none)	Land	-	15,000
Waterloo	Kitchener-Waterloo Flying Club	Land	5,000	1,600
Manitoba—				
Virden	(none)	Land	-	1,150
Winnipeg	Winnipeg Flying Club	Land	-	17,784
Saskatchewan—				
Moose Jaw	Moose Jaw Flying Club, Ltd.	Land	11,600	42,500
North Battleford	(none)	Land	4,520	8,485
Regina	Regina Flying Club	Land	12,000	200,000
Saskatoon	Saskatoon Flying Club	Land	3,600	36,127
Weyburn	(none)	Land	-	2,000
Yorkton	(none)	Land	560	4,500
Alberta—				
Calgary	Calgary Aero Club	Land	7,800	54,638
Cooking Lake	(none)	Land and water	-	20,658
Edmonton	Edmonton and Northern Alberta Aero Club	Land	8,000	165,070
Grande Prairie	(none)	Land	1,080	800
Lethbridge	(none)	Land	4,800	54,231
Medicine Hat	(none)	Land	-	12,000
Peace River	(none)	Land	-	-
British Columbia—				
Cranbrook	(none)	Land	3,850	14,923
Fernie	(none)	Land	3,000	10,000
Grand Forks	(none)	Land	-	2,850
Trail	(none)	Land	-	-
Vancouver	Aero Club of British Columbia	Land and water	34,066	737,000
Vernon	(none)	Land	3,000	5,000
Williams Lake	(none)	Land	-	902
Totals, Municipal Air Harbours			**132,257**	**1,771,009**

OTHER AIR HARBOURS.

Kind.	Landing Surfaces.			
	Land Only.	Water Only.	Land and Water.	Total.
	No.	No.	No.	No.
Public	17	27	Nil	44
Public-auxiliary	2	Nil	“	2
Public-temporary	1	“	“	1
Dominion Government	Nil	3	1	4
Intermediate	30	Nil	Nil	30
Provincial	Nil	11	“	11
Private	13	16	“	29
Totals, Other Air Harbours	**63**	**57**	**1**	**121**
Totals, Municipal Air Harbours	**30**	**3**	**4**	**37**
Grand Totals	**93**	**60**	**5**	**158**

[1] Not included in investments shown in Table 4.

Subsection 2.—Aircraft.

The Manufacture of Aircraft.—An aircraft industry, to construct in Canada the aircraft and equipment required for aviation, is essential to the development of flying. Canadian Vickers was the pioneer firm in Canada. Several manufacturers are now producing original types especially suited to operation in Canada. Several aircraft manufacturers from England and the United States have formed branches in Canada for the assembly and service of their products. There are also a number of plants for the manufacture of landing gear, especially skis and pontoons, designed to meet the particular requirements of Canadian conditions.

The principal statistics of the aircraft industry, *i.e.*, those establishments for which aircraft or parts are the chief product, are shown for the latest available year in the Manufactures chapter (Table **9**, p. 398). However, some other firms principally engaged in the manufacture of other goods also produce aircraft. The total aircraft produced in Canada in recent years was as follows: 18 valued at $117,689 in 1934; 58 at $479,614 in 1935; 109 at $1,210,910 in 1936; and 110 at $1,461,626 in 1937. During 1937 there were imported, almost entirely from the United Kingdom and the United States, 77 aircraft valued at $1,388,621, and 271 aeroplane engines valued at $1,032,664.

3.—Licensed Civil Aircraft in Canada, as at Dec. 31, 1937.

Aircraft.	Dominion and Provincial.	Private.	Flying Clubs.	Commercial.[1]	Total.
	No.	No.	No.	No.	No.
Gross Weight.[2]					
Up to 2,000 lb.	39	95	71	111	316
2,001 to 4,000 lb.	21	16	Nil	95	132
4,001 to 10,000 lb.	17	3	“	127	147
Over 10,000 lb.	Nil	Nil	“	9	9
Totals	**77**	**114**	**71**	**342**	**604**
Type.					
Sea boats	25	1	1	5	32
Amphibians	1	Nil	Nil	Nil	1
Land planes	34	99	68	121	322
Convertible[3]	17	14	2	216	249
Totals	**77**	**114**	**71**	**342**	**604**

[1] Includes aircraft of international companies licensed in Canada. [2] Total weight of aircraft with supplies and full load. [3] May be equipped with wheels, floats, or skis as conditions demand.

Section 3.—Finances and Employees.

Investments.—The development of aviation requires a considerable outlay of capital not only for the provision and replacement of aircraft but also for the provision of landing fields or harbours, buildings, servicing shops, etc.

4.—Investment of Provincial Governments, Flying Clubs, and Commercial Organizations for Civil Aviation in Canada, 1937.

Item.	Provincial Government.	Light Aeroplane Clubs.	Commercial.	Total.
	$	$	$	$
Land and buildings	7,000	31,735	772,997	811,732
Aircraft	415,000	83,928	2,792,687	3,291,615
Tools and equipment	3,900	9,684	444,046	457,630
Furniture and office appliances	Nil	4,224	40,035	44,259
Organization expenditures	“	2,576	1,036,544	1,039,120
Totals	**425,900**	**132,147**	**5,086,309**	**5,644,356**

Revenues and Expenses.—No statistics are available regarding expenditures on flying operations by the Dominion and Provincial Governments or by private individuals. Table 5 shows the revenues and expenditures of Provincial Governments, flying clubs, and commercial flying organizations.

5.—Revenues and Expenditures of Provincial Governments, Flying Clubs, and Commercial Organizations for Civil Aviation in Canada, 1937.

Item.	Provincial Government.	Light Aeroplane Clubs.	Commercial.	Total.
	$	$	$	$
Total operating revenues	Nil	248,776	2,985,504	3,234,280
Total operating expenditures	266,691	233,136	3,432,269	3,932,096
Net operating revenues	Dr. 266,691	15,640	Dr. 446,765	Dr. 697,816

Personnel and Employees.—The numbers of pilots and engineers holding licences under the Controller of Civil Aviation at Mar. 31, 1938, were as follows: private air pilots 636; commercial air pilots 305; limited commercial pilots 134; transport pilots 85; and air engineers 606.

In Table **6** are shown employees and salaries and wages in flying clubs and commercial flying organizations in 1937.

6.—Employees and Salaries and Wages in Civil Aviation in Canada, 1937.

Item.	Provincial Government.	Light Aeroplane Clubs.	Commercial.	Total.
Employees No.	78	70	617	765
Salaries and wages $	167,651	98,170	1,008,199	1,274,020

Section 4.—Traffic.

The freight carried by aircraft consisted largely of machinery, supplies, etc., for mines in the northern part of Quebec, Ontario, the western provinces, and the Northwest Territories. Many of these mines are accessible only by canoe in the summer and dog team in the winter or by aircraft, and aircraft transportation will probably be the cheapest and most effective method of transportation during the life of a large number of them. The amount of freight and express carried by aircraft has grown steadily and rapidly, increasing from 2,372,467 pounds in 1931 to 26,279,156 pounds in 1937. This is considerably more than was carried in any other country, with the possible exception of Russia; the United States reported 7,127,369 pounds for 1937. The activity in mining, particularly in gold mining due to the increased price of gold, has been a large factor in this rapid growth of air transportation of freight and express. Much mail, not included in the mail carried under contract, is also carried into the mines by aircraft. Further information regarding air-mail services appears under Part VIII of this chapter dealing with the Post Office at p. 735.

7.—Commercial Air Traffic in Canada,[1] by Provinces, 1937.

Province or Other Origin.	Passengers Taken On.	Freight Loaded.	Mail Loaded.[2]
	No.	lb.	lb.
Prince Edward Island	630	549	126,460
Nova Scotia	2,394	250	Nil
New Brunswick	1,780	5,839	148,910
Quebec	30,698	3,052,904	186,611
Ontario	63,198	13,450,781	314,406
Manitoba	17,726	3,940,997	253,764
Saskatchewan	14,366	1,176,481	61,459
Alberta	8,601	2,399,635	110,526
British Columbia	9,735	548,582	50,438
Yukon and Northwest Territories	5,626	1,691,265	70,728
Foreign countries	5,075	11,873	127,171
Totals	**159,829**	**26,279,156**	**1,450,473**

[1] Includes international operations. [2] Revised since publication of the 1938 Year Book. Carried under Canadian postal contracts—1,323,584 lb.

8.—Operations of Civil Aircraft in Canada, 1937, with Totals for 1936.

NOTE.—Figures for 1937 have been revised since the publication of the 1938 Year Book. Dashes indicate that the information does not apply or that no information was available.

Item.		1936 Total.	Details, 1937.				1937 Total.
			Dominion and Provincial Governments.	Light Aeroplane Clubs.	Commercial.	International.[1]	
Clubs	No.	22	-	22	-	-	22
Members—							
Flying	"	1,239	-	1,195	-	-	1,195
Other	"	1,396	-	1,200	-	-	1,200
Flights of aircraft	"	160,014	11,009	53,321	122,259	3,814	190,403
Hours flown	"	101,953	8,818	20,549	92,067	5,462	126,896
Miles flown	"	7,803,942	699,777	29,900[2]	9,263,514	762,333	10,755,524
Average duration of flight	min.	38	48	23	45	86	40
Gasoline consumed	gal.	1,681,517	126,971	138,822	1,817,751	139,189	2,222,733
Lubricating oil consumed	"	51,730	3,419	3,496	54,139	3,317	64,371
Personnel Carried—							
Crew carried	No.	132,096	12,092	53,321	127,006	6,807	199,226
Paying passengers carried	"	99,451	Nil	380	101,132	9,352	110,864
Non-paying passengers carried	"	19,209	7,010	26,834[3]	13,821	1,300	48,965
Totals, Personnel Carried	"	250,756	19,102	80,535	241,959	17,459	359,055
Personnel Carried One Mile—							
Crew	"	9.753,690	750,227	30,400[2]	11,795,980	1,362,578	13,939,185
Paying passengers	"	8,724,790	Nil	26,600[2]	10,757,063	1,874,601	12,658,264
Non-paying passengers	"	1,381,146	455,497	-	1,117,706	280,463	1,853,666
Totals, Personnel Carried One Mile.	"	19,859,626	1,205,724	57,000[2]	23,670,749	3,517,642	28,451,115
Pupils given instruction	"	1,304	6	1.009	646	12	1,673
Freight and express carried	lb.	25,387,719	1,961,546	Nil	24,304,774	12,836	26,279,156
Mail—postal contracts	"	1,161,061	-	-	1,261,129	189,344	1,450,473[4]
Ton Miles—							
Freight and express.	No.	1,075,029	-	-	1,873,643	1,080	1,874,723
Mail	"	89,588	-	-	93,946	18,612	112,558
Totals, Ton Miles	"	1,164,617	-	-	1,967,589	19,692	1,987,281
Square miles sketched from aircraft	"	962	-	-	14,474	-	14,474
Square miles photographed—vertical	"	6,472	427	-	10,700	-	11,127[5]
Square miles photographed—oblique	"	156	20	-	3,850	-	3,870[6]
Forest fires detected from the air and reported	"	-	308	-	257	-	565

[1] Flights between Canada and the United States. [2] From point to point only. [3] Includes student passengers. [4] Carried under Canadian postal contracts—1,323,584 lb. [5] Exclusive of 23,500 square miles by National Defence aircraft. [6] Exclusive of 56,500 square miles by National Defence aircraft.

Some countries include in their statistics traffic between two foreign stations of companies incorporated in the reporting country. In Table 7 are shown separately statistics of companies operating regular routes between points in Canada and the United States. These statistics include only those of traffic between the two countries. The company operating between Montreal, Albany, and New York reported only the flights, passengers, and freight, etc., from and to Montreal. Consequently, it would be quite proper to add this international traffic to the strictly Canadian traffic.

The Northern Airways Company has a postal contract for mail in the northwest to be carried by any means feasible and on this contract 50,800 pounds not included in the official air-mail contracts were carried by aeroplane.

9.—Accidents Resulting from Aircraft in Flight in Canada, 1937.

NOTE.—Figures in this table have been revised since the publication of the 1938 Year Book.

Class of Flight.	Accidents Resulting in—		Persons—			
			Killed.		Injured.	
	Death or Injury.	Property Damage Only.	Crew.	Passengers.	Crew.	Passengers.
	No.	No.	No.	No.	No.	No.
COMMERCIAL SERVICES—						
With passengers, freight, mail	3	26	1	3[1]	1	3
With crew only	1	19	Nil	Nil	1	Nil
Instruction	Nil	4	"	"	Nil	"
TOTALS, COMMERCIAL SERVICES	4	49	1	3[1]	2	3
LIGHT AEROPLANE CLUBS—						
Instruction—student solo	2	9	2	Nil	Nil	Nil
Licensed pilot—solo	Nil	10	Nil	"	"	"
Licensed pilot with passenger	1	6	1	1	"	"
TOTALS, LIGHT AEROPLANE CLUBS	3	25	3	1	Nil	Nil
STATE AIRCRAFT—						
Forest protection	1	1	Nil	Nil	1	1
Exhibition and miscellaneous	Nil	1	"	"	Nil	Nil
TOTALS, STATE AIRCRAFT	1	2	Nil	Nil	1	1
Grand Totals	**8**	**76**	**4**	**4[1]**	**3**	**4**

[1] Includes 1 bystander.

10.—Non-Flight Accidents in Connection with Civil Aviation in Canada, 1937.

NOTE.—Figures in this table have been revised since the publication of the 1938 Year Book.

Item.	Employees.		Other Persons.		Totals.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Commercial services	Nil	3	Nil	Nil	Nil	3
Light aeroplane clubs	"	Nil	"	"	"	Nil
International aircraft	"	1	"	"	"	1
State aircraft	"	1	"	"	"	1
Totals	**Nil**	**5**	**Nil**	**Nil**	**Nil**	**5**

Item.	Estimated Damage to Aircraft.	Other Damage and Expenses.
	$	$
Commercial services	150,034	1,330
Light aeroplane clubs	11,632	Nil
International aircraft	Nil	"
State aircraft	8,200	"
Totals	**169,866**	**1,330**

11.—Operation and Accident Averages in Commercial Aviation in Canada, 1937.

NOTE.—Figures in this table have been revised since the publication of the 1938 Year Book.

Item.	No.	Item.	No.
OPERATION AVERAGES.		ACCIDENT AVERAGES.	
Duration of flight ... hours	0·753	Accidents per 1,000 aircraft flights ... No.	0·434
Length of flight ... miles	75·8	Accidents per 1,000,000 aircraft miles ... "	5·720
Paying passengers per flight ... No.	0·8	Fatalities per 1,000 aircraft flights ... "	0·025
Length of passenger journey ... miles	106·4	Fatalities per 1,000,000 aircraft miles. "	0·324
Length of flights with freight ... miles	154·2	Passengers killed per 1,000,000 passenger miles ... "	0·168
Aircraft miles per gallon of fuel ... No.	5·10	Passengers injured per 1,000,000 passenger miles ... "	0·253
Aircraft miles per gallon of lubricating oil ... "	171·11	Crew killed per 1,000,000 crew miles ... "	0·085
		Crew injured per 1,000,000 crew miles ... "	0·170

PART VI.—WIRE COMMUNICATIONS.*

The statistics regarding communication by wire are classified under two sections —telegraphs and telephones.

Section 1.—Telegraphs.

The early history of telegraphic communication in Canada is given at p. 778 of the 1934-35 Year Book.

Dominion Government Telegraph Service.—This service is operated by the Telegraph Branch of the Department of Public Works. Its general object has been to furnish wire communications for outlying and sparsely settled districts where the amount of business is so small that commercial companies will not enter the field but where the public interests require that there should be communication. Thus these facilities include: telegraph and telephone services to scattered settlements around the coast of Cape Breton island; cable services to Campobello, Grand Manan, and other islands in the bay of Fundy, to Prince Edward Island, Magdalen islands, and Anticosti island in the gulf of St. Lawrence; telegraph or telephone services along the north shore of the gulf of St. Lawrence from Quebec to the straits of Belle Isle; cable connections with Pelee and Manitoulin islands in Ontario; some lines to northern outlying districts in Saskatchewan; lines from Edmonton to the Athabaska and Peace River country in Alberta; telegraph or telephone communications around the coast of Vancouver island and to fishing, lumbering, and mining settlements along the coast of the mainland of British Columbia, as well as to isolated mining centres in the interior; and finally the overland telegraph line to Dawson and other settlements in Yukon. Statistics of these services are included in the tables which follow.

1.—Summary Statistics of All Canadian Telegraphs, calendar years 1929-37.

NOTE.—Figures for the years 1920-28 will be found at p. 722 of the 1938 Year Book.

Year.	Gross Revenue.	Operating Expenses.	Net Operating Revenue.	Pole Line Mileage.	Wire Mileage.	Employees.[1]	Offices.	Messages, Land.	Cablegrams.[2]	Money Transferred.
	$	$	$	miles.	miles.	No.	No.	No.	No.	$
1929	16,256,441	12,590,364	3,666,077	52,835	360,883	8,056	4,766	18,029,973	2,086,549	11,295,857
1930	14,264,997	11,791,291	2,473,706	52,824	371,747	7,331	4,661	15,558,224	2,053,059	10,213,475
1931	11,641,729	10,720,949	920,780	53,228	368,583	6,637	4,474	13,200,198	1,784,787	7,475,928
1932	9,381,075	9,020,052	361,023	52,362	366,142	5,788	4,248	10,519,433	1,514,321	4,698,660
1933	9,267,715	8,122,964	1,144,751	52,112	365,489	5,263	4,115	10,095,061	1,597,044	3,632,910
1934	9,972,627	8,436,144	1,536,483	52,406	366,706	5,624	4,171	10,526,496	1,691,477	3,950,854
1935	9,741,394	8,416,329	1,325,065	53,034	365,518	5,903	4,103	11,138,835	1,297,454	3,834,458
1936	10,378,873	8,710,349	1,668,524	52,907	363,180	6,064	4,121	12,735,186	1,391,903	4,296,738
1937	11,410,333	9,467,398	1,942,935	53,001	369,411	6,401	4,761	13,456,330	1,488,767	4,550,731

[1] Excluding commission operators. [2] Excluding messages relayed to the United States.

Telegraph Systems.—The Canadian telegraph systems are composed of lines owned by the Dominion Government and by chartered railway and telegraph companies. The Canadian facilities, in proportion to population, are among the most extensive in the world, and are operated under considerable climatic and geographical disadvantages. In the operation of railways and in the receipt and dispatch of market and press reports, the service to the nation is invaluable.

---

* Revised by G. S. Wrong, B.Sc., Chief of the Transportation and Public Utilities Branch of the Dominion Bureau of Statistics. This Branch issues annual reports dealing with telegraph and telephone statistics, respectively, to which the reader is referred for more detailed information.

Table 2 gives figures of telegraph operation and line and wire mileage of various companies for the years 1933 to 1937. Statistics of the Halifax and Bermudas Cable Co., the Canadian Marconi Wireless Telegraph Co., and the Pacific Cable Board are not included.

2.—Statistics of Chartered Telegraph Companies, calendar years 1933-37.

Company.	Year.	Miles of Line.	Miles of Wire.	Number of Messages.[1]	Number of Offices.[2]
Canadian National Telegraph Co.	1933	24,103	165,058	5,468,221	1,937
	1934	23,980	164,831	5,603,761	1,909
	1935	24,938	162,110	5,807,170	1,708
	1936	24,698	162,922	7,215,653	1,705
	1937	24,716	163,527	7,642,860	2,346[5]
Canadian Pacific Railway Co.	1933	17,477	176,423	4,202,188	1,390
	1934	17,439	177,800	4,439,425	1,474
	1935	17,471	176,430	4,803,265	1,582
	1936	17,604	173,341	4,946,247	1,613
	1937	17,645	178,504	5,120,016	1,612
Western Union	1933	1,185	9,390	[3]	[3]
	1934	1,185	9,390	[3]	[3]
	1935	1,098	9,387	[3]	1
	1936	1,086	9,362	[3]	1
	1937	1,084	9,454	[3]	1
Temiskaming and Northern Ont. Rly. Commission	1933	593	3,111	96,906	35
	1934	593	3,122	112,965	35
	1935	575	3,557	94,436	35
	1936	575	3,485	103,707	35
	1937	575	3,430	117,317	35
North American Telegraph Co., Ltd.	1933	345[4]	445	54,738	15
	1934	345[4]	445	57,030	15
	1935	345[4]	445	57,541	15
	1936	345[4]	445	60,686	15
	1937	345[4]	445	65,980	15
Northern Alberta Rly.	1935	926	2,262	16,569	40
	1936	926	2,262	42,612	40
	1937	926	2,262	46,210	41
Dominion Government Telegraph Service	1933	8,844	11,052	254,910	703
	1934	8,864	11,108	299,869	705
	1935	8,884	11,327	324,721	688
	1936	8,893	11,363	328,866	679
	1937	8,929	11,789	425,094	678

[1] Cablegrams not included. [2] The figures for Table 1 include offices of wireless and cable companies and to that extent are larger than the sums of the items given here for corresponding years. [3] Included with Canadian National. Western Union handles only through business. [4] Leased telephone line. [5] Includes sub-offices.

Submarine Cables.—Sixteen transoceanic cables have termini in Canada—fourteen of them on the Atlantic coast and two on the Pacific. In addition there are eight cables between Atlantic coastal stations in Canada and the United States. The year in which the cable was first demonstrated to be of commercial value was 1866, and up to the present its use has greatly increased. The Atlantic cables are controlled by English and United States interests. The Pacific cable, from Canada to Australia and New Zealand, has been in operation since 1902, and was owned by a partnership of the Governments of Great Britain, New Zealand, Australia, and Canada. As a result of the recommendation of the Imperial Wireless and Cable Conference of 1928, in view of increased wireless competition, it was decided to dispose of the Pacific and West Indian Islands cable systems to the Imperial and International Communication Co., a company formed to take over all Empire-owned cables and lease the Empire-owned beam wireless systems. The necessary legislation was passed by the United Kingdom in February, 1929, and by Canada in June, 1929.

Section 2.—Telephones.

A brief historical account of the early development of telephones in Canada appeared at p. 781 of the 1934-35 Year Book.

Subsection 1.—Systems and Equipment.

Telephone Systems.—The 3,191 telephone systems existing in 1937 included the three large provincial systems in Manitoba, Saskatchewan, and Alberta, and a smaller governmental system in Ontario, together with the system operated by the National Parks of Canada, Department of Mines and Resources. There were also 142 municipal systems, the largest operated by the cities of Edmonton, Fort William, and Port Arthur. Out of the 2,237 co-operative telephone companies, no fewer than 1,152 were in Saskatchewan alone, 757 in Alberta, and 212 in Nova Scotia. The largest among the 558 joint-stock companies operating telephone systems in 1937 were the Bell Telephone Co., and the British Columbia Telephone Co. Over 58 p.c. of the total telephone investment in Canada belonged to the Bell Telephone Co., and their telephones in Quebec and Ontario constituted 56 p.c. of the total for Canada.

Telephone Equipment.—The number of telephones per capita is second only to that of the United States, the numbers being 14·4 telephones per 100 population in the United States in 1937 and 11·9 in Canada. This is a favourable showing in view of the low density of population in Canada as a whole and the fact that 46 p.c. (46·30 p.c. in 1931) of the population is rural.

There were 594,274 telephones out of a total of 867,714 in 51 leading cities of Canada operated from automatic switchboards; the remainder, or 273,440, were operated from manual switchboards. Automatic switchboards have completely displaced manual switchboards in the principal cities of the Prairie Provinces and are displacing them in the other provinces.

3.—Mileages of Pole Line and Wire, and Telephones in Use Classified by Business, Residential, Rural, and Public Pay, as at Dec. 31, 1926-37.

NOTE.—Figures for the years 1911-25 will be found at p. 724 of the 1938 Year Book.

Year.	Systems.	Pole-Line Mileage.	Mileage of Wire.	Telephones in Use.					
				Business.	Residential.	Rural.[1]	Public Pay.	Total.	Per 100 Population.
	No.	miles.	miles.	No.	No.	No.	No.	No.	No.
1926	2,479	201,604	3,306,214	311,557	597,429	270,686	21,336	1,201,008	12·8
1927	2,462	204,245	3,591,035	324,425	637,536	275,544	22,482	1,259,987	13·2
1928	2,447	207,566	3,982,867	345,771	684,820	280,878	23,065	1,334,534	13·8
1929	2,415	220,525	4,486,213	366,418	724,001	269,487	22,916	1,382,822	14·1
1930	2,414	222,113	4,790,224	373,387	740,050	264,681	24,743	1,402,861	14·1
1931	2,399	222,196	4,985,076	369,281	723,868	245,485	25,566	1,364,200	13·1
1932	2,414	220,459	5,089,261	351,509	663,815	220,680	25,241	1,261,245	12·0
1933	2,403	219,753	5,134,871	341,063	617,532	209,611	24,124	1,192,330	11·2
1934	2,388	208,131	5,133,521	349,892	605,206	217,182	24,749	1,197,029	11·1
1935	2,833	207,916	5,120,610	351,427	615,052	218,818	23,518	1,208,815	11·1
1936	3,063	210,926	5,197,042	371,401	641,229	229,940	23,658	1,266,228	11·5
1937	3,191	209,767	5,307,884	386,669	676,001	235,763	24,361	1,322,794	11·9

---

[1] Includes telephones on rural exchange lines and urban exchange lines which have more than four parties.

The density of telephones in the different provinces is naturally influenced by the urbanization of the population because the number of telephones used for business purposes is much greater in cities and towns than in rural areas.

4.—Telephones in Use, by Provinces, as at Dec. 31, 1937.

Province.	On Individual Lines.		On 2- and 4-Party Lines.		On Rural Lines.		Private Branch Exchange and Extensions.		Public Pay Station.	Total.	Telephones per 100 Population.
	Business.	Residence.	Business.	Residence.	Business.	Residence.	Business.	Residence.			
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
P.E.I.	734	989	133	549	171	2,155	437	87	71	5,326	5·7
N.S.	6,141	12,303	645	8,555	813	9,936	5,365	2,091	982	46,831	8·6
N.B.	4,189	7,049	836	7,513	832	5,732	4,304	1,230	722	32,407	7·4
Que.	40,558	74,430	4,186	69,177	3,889	24,123	54,750	11,814	7,719	290,646	9·3
Ont.	71,285	131,052	7,419	168,002	5,334	97,171	86,248	25,641	10,976	603,128	16·2
Man.	9,587	25,889	30	4,721	100	13,084	11,582	1,581	2,064	68,638	9·6
Sask.	11,062	17,164	282	59	8	44,186	4,970	560	329	78,620	8·4
Alta.	12,744	28,010	41	345	820	14,675	8,781	8	155	65,579	8·4
B.C.	18,662	10,100	316	62,533	1,003	11,702	21,305	4,503	1,343	131,467	17·5
Yukon	36	4	41	42	7	22	Nil	Nil	Nil	152	3·8
Totals	**174,998**	**306,990**	**13,929**	**321,496**	**12,977**	**222,786**	**197,742**	**47,515**	**24,361**	**1,322,794**	**11·9**

Subsection 2.—Telephone Finances.

The financial statistics of Table 5 show that the investment in telephone property in Canada, represented by the cost of property, is a very large item and is exceeded in the field of transportation and communications only by the investments in steam railways (pp. 636-637) and roads and highways (pp. 665-667).

5.—Summary Financial Statistics of Telephones in Canada, calendar years, 1920-37.

Note.—For figures for the years 1911-19, see p. 724 of the 1938 Year Book.

Year.	Capitalization.		Cost of Property.	Gross Revenue.	Operating Expenses.	Net Operating Revenue.	Salaries and Wages.[1]	Employees.[2]
	Capital Stock.	Funded Debt.						
	$	$	$	$	$	$	$	No.
1920	36,149,838	80,539,367	144,560,969	33,473,712	28,044,401	5,429,311	17,294,405	21,187
1921	42,194,426	90,343,345	158,678,229	36,986,913	30,080,035	6,906,878	19,000,422	19,943
1922	48,968,198	94,833,825	167,332,932	39,559,149	29,966,181	9,592,968	17,305,759	19,321
1923	57,366,675	95,306,347	179,002,152	42,656,655	32,390,370	10,266,285	18,182,429	21,002
1924	63,798,133	96,216,887	193,884,378	44,322,598	33,615,686	10,706,912	18,293,234	21,685
1925	65,514,130	102,653,161	210,535,795	47,233,617	35,566,947	11,666,670	19,106,383	21,831
1926	68,345,999	110,805,099	227,155,900	50,522,859	38,141,360	12,381,499	25,219,493	23,083
1927	76,460,540	115,981,955	243,999,135	56,907,338	48,561,916	8,345,422	26,254,605	23,437
1928	85,913,239	121,528,627	263,201,651	61,791,333	51,542,544	10,248,789	28,501,378	24,373
1929	93,737,979	141,205,328	291,589,148	65,240,610	56,559,517	8,681,093	31,672,277	27,459
1930	102,777,267	155,411,716	319,101,191	69,420,459	61,886,340	7,534,119	32,085,948	26,575
1931	105,765,685	168,224,084	333,055,119	66,806,580	60,067,016	6,739,564	28,493,252	23,825
1932	106,161,477	172,158,977	333,169,486	60,684,992	55,344,023	5,340,969	24,115,545	21,354
1933	106,336,079	165,229,197	330,490,878	56,062,970	50,423,641	5,639,329	21,276,406	18,796
1934	108,638,326	162,660,037	331,187,227	57,380,171	50,989,088	6,391,083	21,167,834	17,291
1935	109,776,507	159,785,965	327,754,026	57,029,918	50,889,780	6,140,138	22,283,362	17,414
1936	111,239,775	160,331,601	330,048,263	59,770,591	51,938,102	7,832,489	23,365,977	17,775
1937	127,289,481	160,558,719	335,810,564	63,288,855	54,512,191	8,776,664	25,579,850	18,413

[1] Includes salaries and wages chargeable to capital account. [2] Excludes employees on rural lines in Saskatchewan.

6.—Financial Statistics of Telephones in Canada, by Provinces, 1937.

Province.	Capital Liability.	Cost of Property.	Gross Revenues.	Expenses.	Net Income.	Salaries and Wages.	Employees.
	$	$	$	$	$	$	No.
P.E. Island....	1,012,237	1,017,596	204,297	186,034	18,263	64,387	86
Nova Scotia...	8,948,907	10,817,852	2,013,891	1,620,329	393,562	712,230	771
New Brunswick	5,852,001	7,282,708	1,433,351	1,091,285	342,066	545,623	646
Quebec........	158,501,035[1]	72,558,097	41,772,017[1]	35,617,277[1]	6,154,740[1]	6,837,117	4,229
Ontario........	7,002,650	140,995,670	2,403,893	2,053,356	350,537	11,375,162	7,420
Manitoba......	20,879,308	23,021,907	3,139,721	3,039,409	100,312	1,421,546	1,082
Saskatchewan .	33,868,039	33,245,683	2,951,799	3,054,928	Dr. 103,129	837,742[2]	641[2]
Alberta........	29,625,871	17,803,703	3,383,433	2,724,000	659,433	1,059,019	1,073
British Columbia....	22,071,930	29,012,108	5,968,236	5,108,029	860,207	2,716,323	2,458
Yukon.........	86,222	55,240	18,217	17,544	673	10,701	7
Totals.....	**287,848,200**	**335,810,564**	**63,288,855**	**54,512,191**	**8,776,664**	**25,579,850**	**18,413**

[1] Includes Bell Telephone Company data. [2] Excludes rural lines.

Subsection 3.—Telephone Calls.

Systems operating almost 90 p.c. of all telephones in Canada made estimates by actual count on days of normal business, and, after adjusting for uncompleted calls, holidays, Sundays, etc., the average was multiplied by 365. The long-distance calls in practically all cases were the actual long-distance calls put through or completed. The averages were 1,953 local and 23·3 long-distance calls per telephone and 235 telephone conversations per capita. The estimated per capita average for the United States in 1936 was 210.

7.—Local and Long-Distance Calls and Averages per Telephone and per Capita, calendar years 1928-37.

Year.	Local Calls.	Long-Distance Calls.	Total Calls.	Averages per Telephone.			Total Calls per Capita.[1]
				Local.	Long-Distance.	Total.	
	No.	No.	No.	No.	No.	No.	No.
1928..........	2,184,686,000	36,177,000	2,220,863,000	1,637	27·1	1,664	226
1929..........	2,425,019,000	37,852,000	2,462,871,000	1,754	27·4	1,781	246
1930..........	2,475,323,000	37,497,000	2,512,820,000	1,764	26·7	1,791	246
1931..........	2,421,081,000	33,198,000	2,454,279,000	1,775	24·3	1,799	236
1932..........	2,319,354,000	27,219,000	2,346,573,000	1,839	21·6	1,861	223
1933..........	2,247,144,000	24,437,000	2,271,581,000	1,885	20·5	1,905	213
1934..........	2,278,864,000	25,396,000	2,304,260,000	1,904	21·2	1,925	213
1935..........	2,294,580,000[2]	26,019,000	2,320,599,000[2]	1,898[2]	21·5	1,920[2]	212[2]
1936..........	2,444,517,000[2]	27,990,000	2,472,507,000[2]	1,931[2]	22·1	1,953[2]	224[2]
1937..........	2,582,984,000	30,823,000	2,613,807,000	1,953	23·3	1,976	235

[1] Per capita figures are based on official estimates of population given on p. 113. [2] Revised since publication of the 1938 Year Book.

PART VII.—RADIO COMMUNICATIONS.

Radio in Canada, and in ships registered in Canada, was, prior to July 1, 1938, administered under the provisions of the Radiotelegraph Act passed in 1913, and the Regulations issued thereunder from time to time. This Act, owing to the rapid developments of intervening years, was repealed and replaced by The Radio Act, 1938, which became effective on July 1, 1938.

In the interim, however, the Canada Shipping Act had already been revised (see 1936 Year Book pp. 1107-1108), and those sections of the former Radiotelegraph Act pertaining to radio equipment in ships were deleted and embodied in the revised Canada Shipping Act, 1934.

In 1932, the Canadian Radio Broadcasting Act, 1932, was passed and under its terms control of all radio broadcasting was vested in the Canadian Radio Broadcasting Commission. This Act was subsequently repealed and replaced by the Canadian Broadcasting Act, 1936. Under the new Act, the technical control of all broadcasting stations reverted to the Department of Transport, while the regulation of programs was placed in the hands of the Canadian Broadcasting Corporation. It contains a section which empowers the Minister of Transport to make regulations for the control of any equipment liable to cause interference with radio reception.

Accordingly, authority for the administration of all radio within the jurisdiction of Canada is vested in the Minister of Transport under the following legislation: The Radio Act, 1938; The Canada Shipping Act, 1934; The Canadian Broadcasting Act, 1936.

Section 1.—Administration.

Subsection 1.—Technical Control and Licensing.

All radio stations within the Dominion of Canada are required to be licensed, whether used for transmission or reception, or both. The issuance of all classes of licences, the assignment of call signs and frequencies, and the inspection and monitoring of radio stations in Canada is carried out by the personnel of the Radio Division. This latter and the Civil Aviation and Meteorological Divisions form the Air Services Branch of the Department of Transport.

In addition to being subject to the provisions of the Radio Act, 1938, and the regulations issued thereunder, the operation of radio, including broadcasting, in Canada is subject to the International Telecommunication Convention (Madrid, 1932) and the Radiocommunication Regulations issued thereunder (Revision of Cairo, 1938), as well as to those of the Inter-American Radio Conference, Havana, 1937.

The Radio Regulations for ship stations issued under the Canada Shipping Act, 1934, lay down the specifications of radio equipment to be carried on certain classes of vessels, and also designate the qualifications of the operators required to be carried thereon.

To ensure the safety of life at sea, certain passenger steamers and cargo vessels, by international regulation, must carry radio equipment manned by competent operators holding certificates of proficiency in radio. The Department maintains a complete radio inspection service to enforce this regulation. Inspectors, located at major ports throughout the Dominion, are responsible for checking the efficiency of the radio equipment on ships calling at Canadian ports, regardless of their nationality, and seeing that only competent operators are carried. Under the Safety of Life at Sea and Load Line Conventions Act, 1931, ships of foreign and Canadian registry, while in Canadian ports, are surveyed with a view to the issuance of safety certificates. Seventy-six thousand and thirty-one radio stations of all classes were inspected by departmental radio inspectors during the year.

Examinations for certificates of proficiency in radio are also conducted by the inspection staff of the Radio Division. Certificates of all classes to the number of 7,764 were issued up to Mar. 31, 1938. Table 1 shows the total radio stations in operation as at Mar. 31, 1934-38, by classes. The vast majority of these are, of course, private receiving stations, and the distribution of the latter, by provinces, is shown in Table 2.

1.—Summary of Radio Stations in Operation in Canada, by Class, as at Mar. 31, 1934-38.

Class of Station.	1934.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.
Coast stations (Government)	30	32	31	31	31
Direction-finding stations (Government)[1]	13	13	13	13	13
Aeronautical direction-finding stations (Government)	Nil	Nil	Nil	Nil	2
Ship stations (Government)	53	55	56	58	59
Ship stations (commercial)	215	217	212	261	313
Radio beacon stations (Government)[1]	20	21	24	26	26
Radiophone stations (Government)	5	9	9	10	10
Weather-reporting station (Government)	Nil	Nil	Nil	Nil	1
Land station	1	1	1	1	1
Limited coast stations	4	4	5	5	7
Public commercial stations	22	26	36	41	58
Private commercial stations	162	210	275	315	399
Private commercial broadcasting stations	68	74	78	80	88
Experimental stations	92	99	82	126	147
Amateur experimental stations	1,606	2,012	2,380	2,821	3,222
Amateur broadcasting stations	6	2	[2]	[2]	[2]
Experimental short-wave broadcasting stations	Nil	9	10	8	8
Private receiving stations[3]	707,625	812,335	862,109	1,038,500	1,104,207
Radio training school stations	4	4	6	5	6
Licensed aircraft stations	2	1	4	7	91
Aeronautical directional beacon stations (Government)	Nil	Nil	Nil	Nil	13[4]
Commercial receiving stations	"	"	"	"	5
Totals	**709,928**	**815,124**	**865,331**	**1,042,308**	**1,108,707**[4]

[1] One combined direction-finding and radio beacon station included in total of direction-finding stations, and one combined coast and radio beacon station shown in total of coast stations. [2] This class of station discontinued Apr. 1, 1935. [3] Figures include licences issued free to the blind, numbering 3,155 in 1937-38. 2,758 in 1936-37, 2,314 in 1935-36, 1,931 in 1934-35, and 1,517 in 1933-34. [4] Not including 12 stations under construction.

As indicated in Table **1**, there are 88 private commercial broadcasting stations in Canada. The fee for this class of licence is $50·00 per annum. The extent to which private receiving sets are used for the reception of broadcasting in the different provinces is indicated by the table below. There are two classes of private receiving station licences, one for battery operated receivers (fee $2·00 per annum) and the other for electrically operated receivers (fee $2·50 per annum).

2.—Private Receiving Station Licences Issued in Canada, by Provinces, fiscal years 1935-38.

Province.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.
Prince Edward Island	1,945	2,159	3,282	4,198
Nova Scotia	28,989	31,905	40,938	43,321
New Brunswick	20,194	22,347	27,253	29,956
Quebec	204,096	221,702	240,105	268,650
Ontario	342,394	342,056	424,126	445,867
Manitoba	52,928	56,986	69,861	73,099
Saskatchewan	41,573	49,059	68,193	62,636
Alberta	49,107	55,318	72,458	75,843
British Columbia	70,759	80,205	91,978	100,251
Yukon and N.W.T.	350	372	306	386
Totals[1]	**812,335**	**862,109**	**1,038,500**	**1,104,207**

[1] Include licences issued free to the blind as per footnote 3 of Table **1**.

Subsection 2.—Investigation and Suppression of Inductive Interference.

Thirty-three cars are equipped with sensitive apparatus for the investigation of interference to radio reception, and operate from permanent inspection offices located in 22 cities across the Dominion. The inspectors in charge of these cars interview broadcast listeners who have reported interference, and determine the actual source. Tests are then made to ascertain whether or not the interference can be effectively and economically suppressed. The owners of the interfering apparatus are advised of the results of the tests carried out and are given full information regarding the most effective means of suppressing or eliminating the interference. Thirty-four part-time inspectors located in other cities and towns are supplied with portable receivers and a limited amount of equipment for the investigation of interference in their districts.

3.—Investigations of Inductive Interference, fiscal years 1935-38.

Item.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.
Investigated.				
Electrical distribution systems and power lines	8,050	9,278	8,979	8,259
Domestic and commercial electrical appliances	3,278	3,803	4,718	5,743
Defective receivers and radio apparatus	1,541	1,832	1,845	2,026
Totals	**12,869**	**14,913**	**15,542**	**16,028**
Action Taken.				
Sources definitely reported cured	11,039	12,908	12,989	13,764
Sources not yet reported cured	1,674	1,839	2,378	2,047
Sources having no economic cure	156	166	175	217
Totals	**12,869**	**14,913**	**15,542**	**16,028**

Section 2.—Operation of Radio Communications.

Subsection 1.—Dominion Government Radio Stations.

Radio communication facilities of several different types are essential for the safe and accurate navigation of ships and aircraft, and in order to meet the requirements of Canadian as well as foreign ships plying Canadian waters and aircraft flying over Canadian territory, the Department of Transport has established networks of direction-finding, marine radio beacon, aviation radio range, radiotelegraph, and radiotelephone stations.

Department of Transport, Marine Service.—Four distinct networks of stations provide a complete radio aids-to-navigation service for ships. These networks serve the following areas: Great Lakes; Gulf of St. Lawrence and Atlantic Coast; Hudson Bay, Strait and sub-Arctic; and Pacific Coast. The first three networks are interlocking. There is, however, no direct radio connection between the Pacific Coast network and the networks in Eastern Canada and the sub-Arctic, although contact is maintained between a short-wave station operated by the Department of Transport at Ottawa and the Pacific Coast and Hudson Bay and Strait systems.

During the fiscal year 1937-38, Government radiotelegraph stations on the East coast, West coast, the Great Lakes, and Hudson bay and strait handled 393,911 messages or 8,101,848 words, compared with 452,133 messages or 7,872,891 words handled during 1936-37. For 1937-38 the cost of maintenance was $503,025 compared with $474,805 in the previous year.

4.—Type of Service Performed and Areas Served By Marine Radio Stations of the Department of Transport, as at Mar. 31, 1938.

Service Performed.	Areas Served.				
	Great Lakes.	Gulf of St. Lawrence and East Coast.	Hudson Bay, Strait, and Sub-Arctic.	Pacific Coast.	No.
Radiotelegraph.	Tobermory, Ont.	Clarke City, P.Q. Ellis Bay, Anticosti. Fame Point, P.Q.[1] Father Point, P.Q.[1] Grosse Isle, P.Q.[1] Halifax, N.S. Montreal, P.Q.[1] North Sydney, N.S.[1] Point Amour, Nfld.[1] Quebec, P.Q.[1] Shediac, N.B.	Coppermine, N.WT.	Bull Harbour, B.C. Estevan, B.C. Vancouver, B.C. (VAB) Victoria, B.C.	17
Radiotelephone.		Bird Rock, P.Q. Gannet Rock, N.B. Halifax, N.S. Little Wood Island, N.B.		Banfield, B.C. Cape Beale, B.C. Carmanah, B.C. Lennard Island, B.C. Merry Island, B.C. Tofino, B.C.	10
Radiotelegraph and Radiotelephone.	Kingston, Ont. Midland, Ont. Point Edward, Ont. Port Arthur, Ont. Port Burwell, Ont. Sault Ste. Marie, Ont. Toronto, Ont.	Grindstone Island, P.Q.[1]		Alert Bay, B.C. Cape Lazo, B.C. Prince Rupert, B.C. Vancouver, B.C. (VAI)	12
Radio Beacon.	Cove Island, Ont. Long Point, Ont. Main Duck Island, Ont. Michipicoten Island, Ont. Port Weller, Ont. South East Shoal, Ont. Slate Island, Ont.	Cape Bauld, Nfld. Cape Ray, Nfld. Cape Whittle, P.Q. East Point, P.E.I. Heath Point, Anticosti. Natashquan Point, P.Q. Perroquet Island, P.Q. Point des Monts, P.Q. Sable Island, N.S. Seal Island, N.S. Western Head, N.S. West Point, Anticosti.		Langara Island, B.C. Point Atkinson, B.C. Quatsino (Kains Island), B.C. Race Rocks, B.C. Triple Island, B.C.	24
Radio Beacon and Radiotelegraph.		Lurcher Lightship.		Dead Tree Point. B.C.	2
Radio Beacon, Radiotelegraph, and Radiotelephone.		Sambro Lightship.			1
Direction-finding and Radio Beacon.		St. Paul Island, N.S.			1
Direction-finding and Radiotelegraph.		Belle Isle, Nfld. Camperdown, N.S. Canso, N.S. Cape Race, Nfld. Saint John, N.B. Yarmouth, N.S.	Cape Hopes Advance, P.Q. Chesterfield Inlet, N.W.T. Port Churchill, Man. Resolution Island, N.W.T.		10
Direction-finding, Radiotelegraph, and Radiotelephone.			Nottingham Island, N.W.T.	Pachena, B.C.	2

---

[1] Operated by Canadian Marconi Company under contract.

4.—Type of Service Performed and Areas Served By Marine Radio Stations of the Department of Transport, as at Mar. 31, 1938—concluded.

Service Performed.	Areas Served.				
	Great Lakes.	Gulf of St. Lawrence and East Coast.	Hudson Bay, Strait, and Sub-Arctic.	Pacific Coast.	No.
Totals, Stations Serving Specified Areas	15	37	6	21	79
Ottawa short-wave station[1]					1
Grand Total					80

[1] Contacts West Coast and sub-Arctic stations.

Department of Transport, Aeronautical Service.—The radio services provided for aviation may be divided into two categories: first, those furnished on behalf of aircraft flying trans-Canada routes; and secondly, those intended for aircraft flying transatlantic routes. This phase of radio in Canada is being rapidly developed and it is expected that within a very short time aircraft pilots will be provided with as complete a service as is, at the present time, supplied to marine navigators. This service will include the completion of a chain of radio range stations extending from coast to coast along the trans-Canada airway and on important connecting routes. These stations are located at airports approximately every 100 miles and transmit signals which enable pilots to navigate entirely by instruments. Routine weather reports are also broadcast hourly.

5.—Type of Service Performed and Routes Served by Aeronautical Radio Stations of the Department of Transport, as at Mar. 31, 1938.

Service Performed.	Routes Served.			
	Trans-Canada.[1]	Transatlantic.	Trans-Canada and Transatlantic.	No.
Directional Radio Beacon, and Radiotelephone.	Cranbrook, B.C. Edmonton, Alta. Grand Forks, B.C. Lethbridge, Alta. Medicine Hat, Alta. Princeton, B.C. Red Deer, Alta. Regina, Sask. Rivers, Man. Swift Current, Sask. Vancouver, B.C. Winnipeg, Man.			12
Directional Radio Beacon, Radiotelegraph, and Radiotelephone.			St. Hubert, P.Q.	1
Direction-finding.		Longueuil, P.Q.		1
Direction-finding, Radiotelegraph, and Radiotelephone.			Shediac, N.B	1
Totals, Stations Serving Specified Routes.	12[1]	1	2	15
Auxiliary meteorological reporting station, Port Harrison, P.Q.				1
Grand Total				16

[1] Twelve additional stations on this route are under construction in Ontario, located as follows: Earlton Jct., Kapuskasing, Kenora, Killaloe, Muskoka, North Bay, Ottawa, Pagwa, Porquis Jct., Sioux Lookout, Toronto (Malton), Wagaming.

Department of National Defence.—The Royal Canadian Corps of Signals operates, in addition to stations established for military purposes, 17 permanent stations and 2 summer stations situated along the Mackenzie river and in Yukon on behalf of the Bureau of Northwest Territories and Yukon Affairs, Department of Mines and Resources.

Department of Public Works.—Seventeen stations are operated to provide emergency communication between the mainland and certain islands, and 5 stations to provide emergency links in existing landline circuits.

Department of Mines and Resources.—This Department operates one experimental station at the Dominion Observatory for the transmission of time signals, and 4 private commercial and 2 experimental stations in the National Parks of Canada.

Subsection 2.—Provincial Government Radio Stations.

British Columbia.—The Department of Lands operates 8 ship stations, 12 private commercial stations and 9 experimental stations in connection with forest fire protection services. Under the Attorney-General's Department the provincial police operate 4 ship stations and 25 private commercial stations, and the Game Commission operates 3 ship stations.

Saskatchewan.—Department of Natural Resources operates 22 private commercial stations and 3 experimental stations in connection with forest fire protection services; Saskatchewan Power Commission operates 2 experimental stations and 12 commercial receiving stations (in service trucks, etc.) to provide emergency radio communication during power-line failures, etc.

Manitoba.—The Department of Mines and Natural Resources operates 2 private commercial stations and 1 aircraft station in connection with survey parties.

Ontario.—The Forestry Service operates in northwestern Ontario, 5 public commercial stations furnishing a point-to-point radiotelephone service, 4 public commercial stations furnishing a point-to-point radiotelegraph service and 4 public commercial stations furnishing a ground-to-plane radiotelephone service to aviation companies operating in that area; 23 private commercial stations and 38 experimental stations in connection with forest fire protection services.

Subsection 3.—Privately-Owned Commercial Stations.

From Table 1 it will be noted that there were 7 limited coast stations, 58 public commercial stations, and 399 private commercial stations in operation in the Dominion at Mar. 31, 1938. A public commercial station situated at Drummondville, Que., provides transoceanic radiotelegraph and radiotelephone services to Great Britain and Australia. These stations are similar in one respect, in that they are owned and operated by private individuals or companies incorporated under the laws of the Dominion, or one of the provinces thereof.

The limited coast stations, although privately owned, provide ship-to-shore communication services open to the public. One of these stations, owned and operated by the Canadian Marconi Co., situated at Louisburg, N.S., provides a long-range service to ships at sea. The services performed by commercial stations, both public and private, are many and varied. Generally speaking, these stations are located in areas not otherwise served by telephone, telegraph, or other means of telecommunication. The majority of these stations perform a point-to-point radiotelegraph or radiotelephone service, although an increasing number are being utilized for ground-to-plane communication. These stations provide an invaluable means of contact with mining camps, lumber mills, exploration and survey parties, trading posts, and many points which would otherwise be cut off from the outside world.

Private commercial stations may be used only for the handling of messages relative to the private business of the licensee, whereas public commercial stations may be used for the handling of messages for the general public.

Section 3.—Program Broadcasting and Regulation under the Canadian Broadcasting Corporation.

The Canadian Broadcasting Corporation succeeded the Canadian Radio Broadcasting Commission on Nov. 2, 1936, and since that date further substantial progress has been made in development of national broadcasting to provide a regular and satisfactory service to listeners throughout Canada. The legislation under which the Corporation operates is the Canadian Broadcasting Act, 1936. It provides that the Corporation shall consist of a Board of nine Governors chosen to give representation to the principal geographical divisions. In practice, the Board of Governors determines and supervises policy, while actual administration and operations are under the direction of the General Manager.

The regulation of programs is placed in the hands of the Canadian Broadcasting Corporation. However, while under the Act the CBC issues regulations of a general character applicable to all broadcasting in Canada, it does not otherwise interfere with the freedom of choice in programs of privately-controlled stations suitable for covering local areas, but coverage of wider regions is almost entirely dependent upon the CBC networks.

Subsection 1.—Policy and Administration.

Policy.—Major policies formulated by the Board may be considered in four categories: (1) extension of technical facilities; (2) pattern of program development; (3) regulation of commercially sponsored programs; and (4) general administration and control of expenditures.

Extension of Technical Facilities.—This feature of policy embraces two considerations, the first in relation to facilities of the CBC, and the second to extension of privately-owned stations. The Board has adopted the policy that licences for high-power transmitters, on both long- and short-wave bands, should be reserved for use by the public service system. Under Sec. 24 of the Act the CBC is required to review all applications for licences for new stations, as well as applications for increases in power, change in frequency or change in location, and in this problem it is the policy of the Board to give every practicable encouragement and assistance to local stations to serve community interests.

Program Development.—This problem in Canada is still in the pioneer stage and the resolute aim is to encourage and marshal Canadian talent to achieve a standard of performance that will be representative of the native charm of the culture of the various regions and withal distinctively Canadian.

Program Regulation.—By Sec. 22 (1) of the Canadian Broadcasting Act, 1936, the CBC is empowered to control all programs broadcast in Canada. New regulations were promulgated to be applicable on and after Nov. 1, 1937, to all broadcasting stations in Canada and have been effective in eliminating abuses and maintaining a desirable standard and quality in Canadian programs. The close co-operation between the CBC and privately-owned stations has been particularly helpful in observance of these regulations.

Administration.—The by-laws of the Corporation approved by the Governor in Council provide a formula for general administration and reflect the policy of the Board. Vigilant control of expenditures is exercised by the Board in determining the amounts to be available for principal objects, although actual supervision of the details of expenditures is under direction of the Chief Executive. The organization of the CBC consists of the following divisions: Executive, Secretariat, Finance, Engineering, Programs, Publicity, Commercial, and Station Relations.

Subsection 2.—Broadcasting Facilities.

The principal functions of the Engineering Division are: operation and maintenance of CBC stations; new construction; field surveys; and special studies in transmission and development.

Early in November, 1936, the Board of Governors directed that an engineering survey be made to determine the extent of radio coverage in Canada. The result of a comprehensive survey showed that only 49 p.c. of the population was served by the then existing facilities. On account of the imperative need for a satisfactory improvement whereby listeners throughout Canada might be served by national programs, arrangements were made for establishment of high-power stations strategically located to provide efficient coverage. As a first instalment in this plan 50 kw. transmitters were constructed at Hornby, Ont., and Verchères, Que., respectively, and were officially opened in December, 1937. In the next stage, arrangements were made for inauguration of two corresponding high-power transmitters to serve listeners in the Maritime Provinces and in the Prairie Provinces. The 50 kw. transmitter at Sackville, N.B., was opened officially and joined the national network on Apr. 8, 1939, and it is anticipated that the western transmitter, at Watrous, Sask., will be ready for operation in June. When this fourth high-power transmitter is opened, it is calculated that there will be an improvement in coverage from 49 p.c. in 1936 to 84 p.c. in 1939 in terms of population and that, except in remote areas, listeners in rural districts as well as in the urban centres will receive a regular and dependable service from stations on the CBC regional and national network.

The CBC owns or leases 9 stations on which it has control of full broadcasting time and, to complete the basic national network, time for national programs is reserved on 28 selected privately-owned stations. CBC programs are made available as well to 21 other privately-owned stations on an optional basis. A list of basic and supplementary stations on the network is shown in Table 6.

Special studies by the Engineering Division from data obtained in field-strength surveys, and in operation of plant and wire-line transmission facilities, have resulted in important technical improvements in the quality of transmission and service.

The need for a high-power short-wave system has been given careful consideration. This project is one of special national importance as Canada is the only major trading nation without such facilities. Consultations are being continued in the hope of devising a suitable and practicable plan of establishing modern facilities which will enable Canada to reciprocate exchange of programs with Great Britain and other nations.

Interference from foreign stations is still a problem of serious concern to the CBC but upon ratification by the nations concerned of the agreement reached at the Inter-American Wavelength Conference held at Havana in November, 1937, it is confidently expected that application of the formulæ agreed upon will ameliorate this unsatisfactory condition.

6.—Broadcasting Stations of the CBC National Network, showing Time Zones, Identification Letters, Locations and Frequencies, as at Mar. 31, 1939.[1]

NOTE.—Owned or leased stations are marked with a dagger (†) and affiliated stations, on which certain hours are reserved for CBC programs, by an asterisk (*). For the remaining stations the use of CBC programs is optional.

Time Zone.	Identification Letters.	Location.	Frequency.	Time Zone.	Identification Letters.	Location.	Frequency.
			kc.				kc.
A.S.T.	CJCB*	Sydney, N.S.	1240	E.S.T.	CFCO	Chatham, Ont.	630
"	CHNS*	Halifax, N.S.	930	"	CKLW*	Windsor, Ont.	1030
"	CHNX	Halifax, N.S.	6130	"	CFCH*	North Bay, Ont.	930
"	CJLS*	Yarmouth, N.S.	1310	"	CJKL*	Kirkland Lake	1310
"	CFCY*	Charlottetown, P.E.I.	630	"	CKGB*	Timmins, Ont.	1420
"	CHGS	Summerside, P.E.I.	1450	"	CKSO*	Sudbury, Ont.	780
"	CBA†	Sackville, N.B.	1050	"	CJIC	Sault St. Marie, Ont.	1500
"	CKCW*	Moncton, N.B.	1370	"	CKPR*	Fort William, Ont.	580
"	CFNB*	Fredericton, N.B.	550	C.S.T.	CKCA	Kenora, Ont.	1420
"	CHSJ*	Saint John, N.B.	1120	"	CKY*	Winnipeg, Man.	910
"	CHNC*	New Carlisle, Que.	610	"	CJRC	Winnipeg, Man.	630
E.S.T.	CJBR*	Rimouski, Que.	1030	"	CKX*	Brandon, Man.	1120
"	CBJ†	Chicoutimi, Que.	1120	"	CJGX	Yorkton, Sask.	1390
"	CBV†	Quebec, Que.	950	M.S.T.	CKCK*	Regina, Sask.	1010
"	CKCV	Quebec, Que.	1310	"	CJRM	Belle Plaine, Sask.	540
"	CBF†	Montreal, Que.	910	"	CHAB*	Moose Jaw, Sask.	1200
"	CBM†	Montreal, Que.	960	"	CFQC*	Saskatoon, Sask.	600
"	CFCF	Montreal, Que.	600	"	CKBI*	Prince Albert, Sask.	1210
"	CHLP	Montreal, Que.	1120	"	CFAC*	Calgary, Alta.	930
"	CKCH	Hull, Que.	1210	"	CJCJ	Calgary, Alta.	690
"	CBO†	Ottawa, Ont.	880	"	CJCA*	Edmonton, Alta.	730
"	CKCO	Ottawa, Ont.	1010	"	CFRN	Edmonton, Alta.	960
"	CFRC*	Kingston, Ont.	1510	"	CKUA	Edmonton, Alta.	580
"	CBL†	Toronto, Ont.	840	"	CJOC*	Lethbridge, Alta.	950
"	CBY†	Toronto, Ont.	1420	P.S.T.	CJAT*	Trail, B.C.	910
"	CKCL	Toronto, Ont.	580	"	CKOV*	Kelowna, B.C.	630
"	CKOC	Hamilton, Ont.	1120	"	CFJC*	Kamloops, B.C.	880
"	CHML	Hamilton, Ont.	1010	"	CHWK	Chiliwack, B.C.	780
"	CKTB	St. Catharines, Ont.	1200	"	CBR†	Vancouver, B.C.	1100
"	CFPL	London, Ont.	730	"	CKWX	Vancouver, B.C.	1010

---

[1] Revised to Apr. 8, 1939.

Subsection 3.—Finances.

The fixed assets of the Corporation as at Mar. 31, 1938, consisting of real estate, buildings, technical equipment, records, music, and studio and office furniture, at book value amounted to $1,105,649, against which was a reserve for depreciation of $178,942, leaving a net book value of $926,706. Fixed assets were increased by $702,988 during the fiscal year ended Mar. 31, 1938.

The Corporation's operating finances are subject to prudent budgeting control resulting in an adequate operating surplus. A statement of revenue and expenditure during the fiscal year ended Mar. 31, 1938, is shown in Table 7. Of the total expenditure including depreciation in this period, 50·3 p.c. was used for programs, 22·1 p.c. for wire lines, 13·2 p.c. for station operation, 2·7 p.c. for lease of time on private stations, and 6·8 p.c. for administration.

7.—Income and Expenditure of the Canadian Broadcasting Corporation, fiscal year 1938.

Net Income.		Expenditure.	
	$		$
Net licence and commercial revenue	2,252,732	General and administration	146,686
Interest on bank deposits	1,003	Operation of stations and studios	303,969
		Programs	1,088,420
		Station network	536,396
		Depreciation	106,846
			2,182,317
		Less—inventory of expendable stores	17,206
Total Net Income	2,253,735	**Total Expenditure**	2,165,111
		Operating surplus for year	88,624

Subsection 4.—Programs.

The national program service has been expanded extensively since Nov. 2, 1936, by the introduction of new activities and an enlargement of the scope of the service generally. Surveys were made for the purposes of a stocktaking of current programs and of ideas and material for new programs, and also to seek new talent. Since these surveys, plans have been formulated which, however, can only be put into effect gradually, pending recruitment of additional trained producers.

Careful consideration has been given to developing a balanced schedule of programs. Although this is an ideal which can be reached only approximately, the variety of programs so far presented is evidence that no type of program is allowed to outweigh others. Table 8 shows the classification of CBC programs for the fiscal year ended Mar. 31, 1938, according to percentage of programs and percentage of time. In the realm of strictly musical programs symphony concerts, little symphony or string symphony concerts, vocal and instrumental recitals, choral concerts, and various instrumental ensembles have been presented regularly. Special consideration has been given to encouragement of Canadian symphony orchestras and of ensembles of a recognized professional standard.

The dramatic field has been surveyed with care and special emphasis has been placed on offering an incentive to creative writing of distinctively Canadian plays especially adapted to broadcasting. To this end the CBC instituted its first National Drama Contest; 199 dramas were received from all parts of Canada. Also, for the first time, the CBC broadcasted a series of Shakespeare's plays. The services of leading British and United States actors were obtained for the chief roles.

The talks schedule has been greatly increased and in addition to commentaries on the news, current topics, and book reviews, special series by eminent Canadians have been introduced. Advantage has also been taken of the presence of distinguished visitors to bring to Canadian listeners authoritative and timely talks. As a result of experiment it is hoped to inaugurate a panel of Canadian speakers especially gifted in the preparation and delivery of interesting talks. By the presentation of round table and other discussions, the CBC has contributed to the stimulation of general interest in controversial public problems.

Actuality broadcasts and special events have a predominant place in the schedule of national programs. The event which overshadowed all others in this field was the descriptive commentaries and associated programs on the occasion of the Royal Visit. All the arrangements and production for broadcasting were solely in the hands of the Canadian Broadcasting Corporation.

Other special events and sports broadcasted in 1938-39 were: Allan Cup Hockey; Canadian Basketball Championships; Canadian Amateur Golf Championships; Canadian Open Golf Championships; Big Four and Intercollegiate Football; Eastern Canada and Dominion Football Championships; Canadian Boxing Championships; Canadian Track and Field Championships; King's Plate Horse Race; Canadian Lawn Tennis Championships; Canadian Canoe Championships; Gold Cup Motor Boat Races; International Fishermen's Races; Canadian Lacrosse Championships; Opening Ivy Lea Bridge at which the Prime Minister and President Roosevelt spoke; Conferring of Honorary Degree on President Roosevelt by Queen's University; Opening Blue Water Bridge, Sarnia, Ont.; Centennial Celebrations, Prescott, Ont.; Transatlantic Flight by flying boat *Mercury;* Opening Ottawa Airport; Opening Trans-Canada Air Express; Opening Val D'Or-Rouyn railway line; Armistice Day Ceremony, Parliament Hill, Ottawa; Royal Winter Fair; Opening Canada-Newfoundland Telephone Service; Farewell Banquets for Rt. Hon. R. B.

Bennett, Toronto, Ont., and Saint John, N.B.; Unveiling Memorial to Canadian Women in Senate Chamber, Ottawa; International Tuna Fishing Competition, N.S.

A specially equipped mobile unit constructed for the CBC has been of unusual value in extending the scope and increasing the quality of remote control broadcasts.

Exchange relations with the British Broadcasting Corporation and with the major broadcasting systems in the United States are most satisfactory and of distinct advantage in enabling the CBC to bring to Canadian listeners selected sustaining programs of an exceptional standard and interest, such as grand operas by the Metropolitan Opera Association, the NBC Symphony Concerts, and the Sunday afternoon concerts by the New York Philharmonic Society. The many other programs received in exchange have added immeasurably to the pleasure of listeners in Canada, and it is gratifying that CBC programs relayed to Great Britain and the United States have been highly commended. The exchange of producers between the CBC and the BBC has already proved helpful in fortifying productive skill and enlarging the scope of ideas.

The exchange of programs with other countries, notably France, Sweden, South Africa, New Zealand, and Australia, has been explored, and these countries are prepared to exchange programs with Canada as soon as the CBC inaugurates high-power short-wave facilities to place the exchange on a reciprocal basis. For the first time Canada broadcasted a program to the world, The Fifth World Concert on Oct. 23, 1938. It was relayed to twenty-four countries.

The number of programs broadcast per month showed a continued increase, so that by the end of 1938 over 1,600 programs per month totalling over 600 hours were being broadcast. This increase meant that still more Canadian talent is being utilized. Some 3,807 artists were involved exclusive of groups and choirs paid in bulk. During the winter season of 1938-39, the average number of network hours per week was 77, with an average of 16¾ hours or 30·4 p.c. devoted to commercial programs, and 60¼ hours or 69·6 p.c. devoted to sustaining (non-commercial) programs.

8.—Classification of CBC Programs, showing Percentage Distribution, fiscal year 1938.

Class of Program.	Number of Programs.	Percentage of Programs.	Percentage of Time.
Actuality broadcasts	58	0·4	0·7
Appeals	26	0·2	[1]
Band music	98	0·7	0·9
Chamber music	352	2·7	3·7
Children's	283	2·2	1·6
Choral music	161	1·2	1·6
Community singing	29	0·2	0·3
Concert music	1,131	9·0	11·2
Dance music	975	7·5	8·7
Debates	52	0·4	0·4
Drama	395	3·1	3·6
Drama (Biblical)	65	0·5	0·7
Dramatic-musical	70	0·5	0·8
Folk music	42	0·3	0·3
Interviews	21	0·2	[1]
Light popular music	459	3·6	3·9
Musical novelties	361	2·8	2·8
News bulletins	1,361	10·5	7·0
Northern Messenger	27	0·2	0·4
Old-time music	95	0·7	1·0
Operas	26	0·2	0·6
Operettas	17	0·1	0·1
Organ music	303	2·3	2·2
Overseas, BBC	351	2·7	6·3
Overseas, Germany	22	0·2	0·2
Poetry readings	78	0·6	0·5
Recitals (instrumental)	534	4·1	2·7
Recitals (vocal)	842	6·5	4·3
Recordings	408	3·2	2·6
Religious broadcasts	85	0·7	0·7
Shut-in broadcasts	9	0·1	[1]
Slumber music	114	0·9	1·3
Special events	244	1·9	2·1
Stock quotations	696	5·4	3·6
Symphony music	284	2·2	4·5
Talks	1,733	13·4	9·0
Variety	803	6·2	8·0
Vocal ensembles	213	1·6	1·6
Weather forecasts	99	0·8	0·1
Totals	**12,922**	**100·0**	-

[1] Not reported.

PART VIII.—THE POST OFFICE.*

Historical.—A brief account of the pre-Confederation development of postal services in Canada was given on pp. 789-790 of the 1934-35 Year Book.

At Confederation the provincial systems were transferred to the Dominion. The Post Office Act of 1867 established a service throughout Canada. The domestic rate on letters was reduced from 5 to 3 cents per half-ounce, and in 1870 the rates to the United States and the United Kingdom were reduced from 10 to 6 cents and from 12½ to 6 cents, respectively, per half-ounce. In 1875 a convention between Canada and the United States reduced postal rates between the countries to the domestic level. In 1878, on the admission of Canada to the Postal Union, letter postage to the countries of the Postal Union was reduced to 5 cents per half-ounce. After a conference in 1897 Imperial penny postage (2 cents per half-ounce) was established on Dec. 25, 1898, while the domestic rate was reduced from 3 to 2 cents per ounce. These rates were maintained until 1915, when, with the rising costs of the War period, rates were increased. Penny postage again became effective for Canada, to the United States, Newfoundland, and other countries of North America on July 1, 1926, and to the United Kingdom and all other places within the British Empire on Dec. 25, 1928, with later extensions to France and South America. On July 1, 1931, a special revenue tax, imposed by the Government for the purpose of obtaining additional revenue, came into effect on letters addressed to places in Canada, throughout the Empire, to France, to Spain and to North and South America generally, making the rate in these cases 3 cents for the first ounce and 2 cents for each additional ounce.

The Post Office Department is administered by the Postmaster General. Besides the several administrative branches at Ottawa, the Dominion is divided into 15 districts, each in charge of a District Director or Superintendent of Postal Service. The Canadian system embraces a territory more extensive than that served by any other system, excepting those of United States and Russia, and the relatively small population compared with the great distance to be covered makes inevitable a peculiarly difficult and relatively expensive service.

Rural Mail Delivery.—A system of rural mail delivery was inaugurated in Canada on Oct. 10, 1908, limited at that time to existing stage routes. The service was greatly extended by new regulations taking effect on Apr. 1, 1912. The result has been an increase in the number of rural routes from approximately 900 in 1912 to 4,575 in 1938, having 261,818 mail boxes as against approximately 25,000 in 1912.

Mail Transportation.—The conveyance of mail by land, water, and air entailed a total expenditure of $13,637,680 during the fiscal year ended 1938. Railway carriage cost $6,897,341, land transportation cost $6,087,889, conveyance by steamship cost $277,049, while that by air cost $375,401. These amounts were paid solely for services rendered as carriers. For details regarding air-mail services, see p. 736. Special subsidies are granted to assure the maintenance of certain steamship services. Since these subsidized services provide transportation for passengers and freight as well as mail, the subsidies are included with other expenditures on water transportation on pp. 687-688.

Statistics.—Tables 1 to 3 show, respectively, the numbers of post offices in operation in Canada in the latest six years, the gross revenue in each office collecting $10,000 and upwards in 1937 and 1938, and the net revenues and expenditures of the Department in various years since 1890.

---

* Revised by H. Beaulieu, Director, Administrative Services, Post Office Department.

1.—Numbers of Post Offices in Operation, by Provinces, as at Mar. 31, 1933-38.

Province.	1933.	1934.	1935.	1936.	1937.	1938.
Prince Edward Island	114	115	114	114	114	115
Nova Scotia	1,629	1,600	1,571	1,565	1,551	1,543
New Brunswick	1,016	1,004	1,000	1,002	1,009	1,023
Quebec	2,446	2,450	2,466	2,494	2,542	2,592
Ontario	2,524	2,523	2,540	2,559	2,589	2,623
Manitoba	778	778	788	788	794	798
Saskatchewan	1,423	1,426	1,433	1,460	1,482	1,501
Alberta	1,215	1,213	1,228	1,243	1,246	1,259
British Columbia	892	889	892	895	908	929
Yukon	19	18	18	18	18	18
Northwest Territories	18	19	19	18	19	20
Canada	**12,074**	**12,035**	**12,069**	**12,156**	**12,272**	**12,421**

2.—Statistics of Gross Postal Revenues of Offices Collecting $10,000 and upwards, fiscal years 1937 and 1938.

Province and Name of Post Office.	1937.	1938.
	$	$
P.E. Island.		
Charlottetown	80,282	83,619
Summerside	25,053	25,524
Totals, P. E. Island	**173,542**	**178,334**
Nova Scotia.		
Amherst	35,607	36,591
Antigonish	17,252	17,896
Bridgetown	10,021	10,735
Bridgewater	19,585	19,739
Digby	11,666	12,048
Glace Bay	18,643	19,496
Halifax	553,272	578,441
Kentville	22,974	24,047
Liverpool	15,611	16,536
Lunenburg	14,090	14,193
New Glasgow	39,306	41,041
North Sydney	16,345	17,045
Pictou	13,912	14,331
Springhill	11,995	13,055
Stellarton	10,283	10,791
Sydney	76,064	83,026
Truro	57,313	59,731
Windsor	81,833	19,828
Wolfville	14,973	15,059
Yarmouth	30,773	30,873
Totals, Nova Scotia	**1,468,049**	**1,529,655**
New Brunswick.		
Bathurst	14,429	15,860
Campbellton	24,314	26,241
Chatham	10,961	11,912
Dalhousie	10,089	10,604
Edmundston	17,400	18,319
Fredericton	82,550	87,900
Moncton	462,878	493,630
Newcastle	13,526	14,497
Saint John	278,722	291,055
St. Stephen	18,836	19,395
Sackville	20,257	21,832
Sussex	16,255	16,683
Woodstock	19,671	19,948
Totals, New Brunswick	**1,296,074**	**1,367,917**
Quebec.		
Amos	21,155	22,240
Chicoutimi	32,088	36,873
Coaticook	12,504	12,596
Drummondville East	34,629	36,779
Farnham	16,179	16,492
Gardenvale	29,153	11,331
Granby	31,090	31,630
Quebec—concluded.		
Grand'Mère	13,854	14,640
Hull	39,752	41,271
Joliette	24,523	24,882
Lachute	10,820	11,077
La Tuque	13,702	14,989
Lennoxville	10,989	10,790
Lévis	24,980	27,886
Magog	13,169	13,892
Montmagny	12,591	12,642
Montreal	4,918,172	5,020,376
Noranda	21,114	24,848
Quebec	683,480	812,545
Rimouski	20,515	24,074
Rock Island	12,918	13,904
Rouyn	23,559	29,551
Ste. Agathe des Monts	11,881	12,332
Ste. Anne de Beaupré	13,364	14,576
St. Hyacinthe	47,418	49,007
St. Jean	33,187	35,930
St. Jérôme	18,773	20,379
Shawinigan Falls	27,317	30,312
Sherbrooke	128,895	135,642
Sorel	20,508	21,032
Thetford Mines	20,258	22,147
Three Rivers	82,960	90,188
Valleyfield	19,133	19,408
Victoriaville	22,538	24,950
Totals, Quebec	**8,020,065**	**8,457,558**
Ontario.		
Amherstburg	10,056	11,155
Arnprior	14,638	14,678
Aurora	13,108	13,736
Aylmer West	11,960	11,974
Barrie	32,817	34,488
Belleville	73,571	75,289
Bowmanville	15,164	16,274
Bracebridge	15,677	16,710
Brampton	31,162	30,325
Brantford	142,514	144,160
Brockville	55,280	58,538
Burlington	11,040	13,052
Campbellford	10,689	10,846
Carleton Place	16,910	16,556
Chatham	81,544	84,844
Cobalt	14,291	13,571
Cobourg	29,601	30,143
Cochrane	18,319	18,634
Collingwood	16,637	16,819
Copper Cliff	12,095	12,835
Cornwall	52,594	56,915
Dundas	16,721	17,819
Dunnville	24,091	24,759

2.—Statistics of Gross Postal Revenues of Offices Collecting $10,000 and upwards, fiscal years 1937 and 1938—continued.

Province and Name of Post Office.	1937.	1938.
	$	$
Ontario—continued.		
Fergus	21,694	22,316
Fort Erie North	22,344	22,266
Fort Frances	21,574	23,829
Fort William	86,863	95,945
Galt	67,797	71,083
Gananoque	18,048	19,622
Georgetown	22,607	22,849
Goderich	18,097	18,528
Gravenhurst	11,838	13,811
Grimsby	11,791	12,673
Guelph	107,991	112,906
Haileybury	13,622	13,884
Hamilton	658,862	678,085
Hanover	15,889	16,395
Hawkesbury	11,226	11,241
Hespeler	11,724	11,233
Huntsville	17,239	18,427
Ingersoll	24,877	24,883
Kapuskasing	12,095	12,986
Kenora	31,780	32,948
Kincardine	19,581	18,705
Kingston	127,563	135,607
Kingsville	10,831	11,192
Kirkland Lake	59,870	67,547
Kitchener	148,821	151,301
Leamington	23,557	23,447
Lindsay	36,305	37,805
Listowel	12,773	12,753
London	534,018	544,477
Meaford	11,574	11,930
Midland	21,848	22,135
Napanee	21,385	22,198
New Liskeard	24,810	27,486
Newmarket	19,240	19,967
Niagara Falls	124,587	136,252
North Bay	72,937	76,034
Oakville	21,817	23,564
Orangeville	13,011	13,936
Orillia	43,506	45,599
Oshawa	119,951	112,992
Ottawa	731,202	733,832
Owen Sound	50,878	54,395
Paris	22,528	22,333
Parry Sound	17,155	18,804
Pembroke	30,268	34,931
Perth	29,182	29,318
Peterborough	131,954	137,036
Petrolia	10,848	12,186
Picton	19,569	20,591
Port Arthur	69,419	76,463
Port Colborne	21,238	21,658
Port Credit	11,186	11,336
Port Hope	22,817	24,059
Prescott	13,348	13,705
Preston	26,783	27,461
Red Lake	10,962	10,923
Renfrew	26,153	26,679
St. Catharines	121,736	126,653
St. Marys	16,454	16,746
St. Thomas	60,020	65,868
Sarnia	67,266	69,467
Sault Ste. Marie	71,842	78,067
Schumacher	10,208	10,205
Seaforth	10,618	10,373
Simcoe	46,222	44,606
Sioux Lookout	12,861	13,032
Smiths Falls	25,249	26,810
South Porcupine	14,454	14,801
Stratford	65,620	67,238
Strathroy	13,663	14,168
Sudbury	95,034	106,216
Thorold	13,302	13,868
Tilsonburg	18,460	20,309
Timmins	68,300	68,094
Toronto	7,626,323	7,795,964
Trenton	26,256	26,634

Province and Name of Post Office.	1937.	1938.
	$	$
Ontario—concluded.		
Walkerton	11,659	11,692
Wallaceburg	14,915	15,016
Waterloo	53,890	56,555
Welland	44,259	46,992
Weston	23,082	23,793
Whitby	14,128	14,210
Windsor	417,201	437,974
Wingham	11,483	11,929
Woodstock	60,520	62,633
Totals, Ontario	**15,735,895**	**16,203,509**
Manitoba.		
Brandon	81,012	84,113
Dauphin	23,627	24,575
Flinflon	17,713	19,316
Neepawa	11,739	12,141
Norwood Grove	10,026	11,412
Portage la Prairie	29,626	30,962
St. Boniface	26,682	25,923
The Pas	17,491	17,171
Wawanesa	11,928	11,830
Winnipeg	3,049,995	3,021,180
Totals, Manitoba	**3,802,996**	**3,820,497**
Saskatchewan.		
Estevan	15,719	15,852
Humboldt	14,220	13,322
Lloydminster	13,437	13,894
Melfort	15,928	16,384
Melville	14,838	14,608
Moose Jaw	104,168	98,504
North Battleford	35,895	34,807
Prince Albert	55,051	56,458
Regina	863,020	842,430
Rosetown	11,941	10,366
Saskatoon	334,454	314,624
Shaunavon	11,299	10,508
Swift Current	33,807	31,270
Tisdale	11,044	11,822
Weyburn	24,090	22,565
Yorkton	38,468	38,214
Totals, Saskatchewan	**2,750,110**	**2,651,482**
Alberta.		
Banff	19,547	20,756
Calgary	598,258	620,125
Camrose	16,791	17,365
Drumheller	22,430	22,114
Edmonton	592,073	641,665
Grande Prairie	12,035	13,377
Lacombe	11,564	11,982
Lethbridge	77,855	81,206
Medicine Hat	42,981	42,445
Ponoka	10,338	10,955
Red Deer	21,591	23,425
Vegreville	10,798	11,734
Vermilion	10,076	10,365
Wetaskiwin	15,916	16,274
Totals, Alberta	**2,296,780**	**2,405,014**
British Columbia.		
Chilliwack	22,874	23,738
Courtenay	11,717	13,542
Cranbrook	20,424	21,675
Duncan	24,008	27,106
Fernie	11,082	11,207
Kamloops	39,463	40,933
Kelowna	32,576	34,237
Kimberley	10,328	11,627
Mission City	10,177	11,762
Nanaimo	32,350	34,905
Nelson	50,237	53,546

2.—Statistics of Gross Postal Revenues of Offices Collecting $10,000 and upwards, fiscal years 1937 and 1938—concluded.

Province and Name of Post Office.	1937.	1938.	Province and Name of Post Office.	1937.	1938.
British Columbia—conc.	$	$	**Yukon.**	$	$
New Westminster	100,313	109,145	**Totals, Yukon**	**17,129**	**17,437**
Penticton	29,610	32,856			
Port Alberni	18,400	20,072	**Summary.**		
Powell River	13,321	13,936	Prince Edward Island	173,542	178,334
Prince George	11,581	13,134	Nova Scotia	1,468,049	1,529,655
Prince Rupert	29,988	31,830	New Brunswick	1,296,074	1,367,917
Revelstoke	14,953	15,169	Quebec	8,020,065	8,457,558
Rossland	10,223	11,534	Ontario	15,735,895	16,203,509
Salmon Arm	11,182	11,356	Manitoba	3,802,996	3,820,497
Trail	43,275	47,817	Saskatchewan	2,750,110	2,651,482
Vancouver	1,617,289	1,718,432	Alberta	2,296,780	2,405,014
Vernon	34,618	37,613	British Columbia	3,156,310	3,373,149
Victoria	342,264	361,636	Yukon	17,129	17,437
Totals, Br. Columbia	**3,156,310**	**3,373,149**	**Totals, Canada**	**38,716,950**	**40,004,552**

3.—Revenues and Expenditures of the Post Office Department, quinquennial fiscal years 1890-1910, and each fiscal year 1911-38.

NOTE.—For all other years since Confederation, see 1911 Year Book, p. 288.

Fiscal Year.	Net Revenue.[1]	Expenditure.	Deficit.	Surplus.	Fiscal Year.	Net Revenue.[1]	Expenditure.	Deficit.	Surplus.
	$	$	$	$		$	$	$	$
1890	2,357,389	3,074,470	717,081	-	1922	26,554,538	28,121,425	1,566,887	-
1895	2,792,790	3,593,647	800,857	-	1923	29,262,233	27,794,502	-	1,467,731
1900	3,183,984	3,645,646	461,662	-	1924	29,100,492	28,305,937	-	794,555
1905	5,125,373	4,634,528	-	490,845	1925	28,581,993	29,873,802	1,291,809	-
1910	7,958,547	7,215,337	-	743,210	1926	31,024,464	30,499,686	-	524,778
1911	9,146,952	7,954,223	-	1,192,729	1927	29,378,697	31,007,698	1,629,001	-
1912	10,482,255	9,172,035	-	1,310,220	1928	30,529,155	32,379,196	1,850,041	-
1913	12,060,476	10,882,805	-	1,177,671	1929	31,170,904	33,483,058	2,312,154	-
1914	12,956,216	12,822,058	-	134,158	1930	32,969,293	35,036,629	2,067,336	-
1915	13,046,650	15,961,191	2,914,541	-	1931	30,416,107	36,292,604	5,876,497	-
					1932	32,476,604	34,448,986	1,972,382	-
1916	18,858,410	16,009,139	-	2,849,271	1933	30,825,155	30,167,827	-	657,328
1917	20,902,384	16,300,579	-	4,601,805	1934	30,367,465	29,202,730	-	1,164,735
1918	21,345,394	18,046,558	-	3,298,836	1935	31,248.324	28,974,316	-	2,274,007
1919	21,602,713	19,273,584	-	2,329,129	1936	32,507,888	30,100,102	-	2,407,787
1920	24,449,917	20,774,385	-	3,675,532	1937	34,274,552	30,538,575	-	3,735,977
1921	26,331,119	24,661,262	-	1,669,857	1938	35,546,161	32,296,805	-	3,249,356

[1] Exclusive of commissions and allowances to postmasters and some other smaller items. The gross revenue in the fiscal year 1937 was $41,181,566, and in 1938, $42,998,349.

Postage.—The net revenue receipts shown in Table 3 are received mainly in the form of postage as is indicated by the following gross figures.

The gross value of the postage stamps, post cards, etc., sold during each of the latest eight fiscal years, was: $25,769,781 in 1931, $27,242,715 in 1932, $25,999,159 in 1933, $25,541,129 in 1934, $26,303,451 in 1935, $27,341,608 in 1936, $28,179,323 in 1937, and $28,808,513 in 1938. Receipts from postage paid in cash were as follows: $8,887,322 in 1931, $9,078,136 in 1932, $8,173,950 in 1933, $8,129,387 in 1934, $8,619,712 in 1935, $9,277,072 in 1936, $10,203,389 in 1937, and $10,865,895 in 1938.

Auxiliary Services.—The auxiliary postal services—the issuing of money orders (including postal notes) and the facilities offered by the Post Office Savings Bank—have expanded enormously since Confederation. In 1868, there were 515 money order offices in operation, issuing orders to an amount of $3,342,574: the following tables show the magnitude of operations now. Statistical tables showing deposits with the Government savings banks since Confederation and the business of the Post Office Savings Bank, 1933-38, are included in the chapter on Currency and Banking (Chapter XXII).

4.—Operations of the Money Order System in Canada, fiscal years 1911-38.

Note.—For 1868 to 1900, see Canada Year Book, 1911, p. 289; for 1901-10, see 1932 Year Book, p. 622.

Fiscal Year.	Money Order Offices in Canada.	Orders Issued in Canada.	Value of Orders Issued in Canada.	Value Payable in—		Value of Orders Issued in Other Countries, Payable in Canada.
				Canada.	Other Countries.	
	No.	No.	$	$	$	$
1911	3,501	4,840,896	70,614,862	45,451,425	25,163,437	8,664,557
1912	3,673	5,777,757	84,065,891	52,568,433	31,497,458	8,712,667
1913	3,923	8,688,563	101,153,272	61,324,030	39,829,242	9,081,627
1914	4,274	7,227,964	109,500,670	66,113,221	43,387,449	9,807,313
1915	4,499	6,990,813	89,957,906	64,723,941	25,233,965	9,707,383
1916	4,690	7,171,375	94,469,871	75,781,582	18,688,289	9,868,137
1917	4,810	8,698,502	119,695,535	97,263,961	22,431,574	9,704.610
1918	4,930	9,919,665	142,959,167	116,764,491	26,194,676	9,385,627
1919	4,953	9,100,707	142,375,809	116,646,096	25,729,713	10,351,021
1920	5,106	9,947,018	159,224,937	135,201,816	24,023,121	10,050,361
1921	5,197	11,013,167	173,523,322	155,916,232	17,607,090	6,680,971
1922	5,266	10,031,198	139,914,186	124,316,726	15,597,460	5,515,069
1923	5,337	11,098,222	143,055,120	126,617,350	16,437,770	8,986,041
1924	5,472	12,561,490	159,855,115	141,620,372	18,234,743	13,508,396
1925	5,578	13,435,448	163,519,320	145,769,761	17,749,559	13,957,613
1926	5,706	14,784,230	177,840,231	158,844,831	18,995,400	15,600,917
1927	5,797	15,760,994	188,219,777	167,206,859	21,012,918	15,532,673
1928	5,923	17,505,563	200,773,403	177,880,036	22,893,367	15,398,181
1929	6,066	17,210,316	203,129,237	179,833,100	23,296,138	14,096,027
1930	6,209	17,525,979	197,699,353	174,285,024	23,414,329	14,016,240
1931	6,401	16,313,134	167,749,651	149,012,359	18,737,292	12,906,487
1932	6,414	14,324,715	132,625,260	121,391,212	11,234,048	9,097,086
1933	6,467	12,659,379	107,767,394	102,009,862	5,757,532	5,079,234
1934	6,464	12,633,710	107,471,321	101,926,369	5,544,952	5,401,118
1935	6,531	12,673,794	114,832,665	107,981,978	6,850,687	5,932,762
1936	6,627	13,133,354	121,810,839	114,761,204	7,049,635	6,559,564
1937	6,737	13,746,743	133,155,222	124,479,322	8,675,900	7,280,169
1938	6,840	14,554,010	144,445,972	134,262,900	10,183,072	7,590,616

5.—Money Order Statistics, by Provinces, and Total Postal Notes, fiscal years 1934-38.

Province.	1934.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.
Money Order Offices in—					
Canada	**6,464**	**6,531**	**6,627**	**6,737**	**6,840**
Prince Edward Island	73	73	73	72	72
Nova Scotia	425	428	429	441	443
New Brunswick	305	310	315	317	325
Quebec	1,373	1,380	1,400	1,427	1,465
Ontario	1,678	1,690	1,725	1,736	1,745
Manitoba	460	471	476	481	493
Saskatchewan	935	948	960	993	1,001
Alberta	684	691	708	723	735
British Columbia	525	534	535	541	554
Yukon	6	6	6	6	7

5.—Money Order Statistics, by Provinces, and Total Postal Notes, fiscal years ended Mar. 31, 1934-38—concluded.

Province.	1934.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.
Money Orders Issued in—					
Canada	**12,633,710**	**12,673,794**	**13,133,354**	**13,746,743**	**14,554,010**
Prince Edward Island	117,322	109,122	114,868	118,827	115,345
Nova Scotia	880,606	891,104	911,153	927,924	990,727
New Brunswick	483,746	488,075	496,936	523,288	581,189
Quebec	1,864,996	1,874,251	1,979,591	2,127,105	2,486,055
Ontario	3,320,911	3,426,862	3,465,843	3,648,744	4,008,397
Manitoba	932,236	909,860	925,054	990,123	1,076,394
Saskatchewan	2,228,527	2,146,163	2,318,370	2,348,036	2,066,129
Alberta	1,654,541	1,643,725	1,673,634	1,725,801	1,772,232
British Columbia	1,140,596	1,174,553	1,236,914	1,324,818	1,444,711
Yukon	10,229	10,079	10,991	12,077	12,831
Value of Money Orders Issued in—	$	$	$	$	$
Canada	**107,471,321**	**114,832,665**	**121,810,839**	**133,155,222**	**144,445,972**
Prince Edward Island	1,016,634	969,870	1,014,092	1,099,648	1,065,014
Nova Scotia	7,268,581	7,805,723	8,130,794	8,512,734	9,433,039
New Brunswick	4,181,138	4,341,140	4,509,609	4,837,795	5,575,619
Quebec	15,213,011	16,308,934	17,554,015	19,738,187	24,334,638
Ontario	28,211,079	30,868,605	32,039,755	35,379,028	40,738,666
Manitoba	7,843,981	8,238,040	8,211,359	9,441,609	10,980,301
Saskatchewan	18,944,362	19,654,449	22,384,564	23,851,266	19,106,520
Alberta	14.840,731	15,876,608	16,392,097	17,424,010	18,654,558
British Columbia	9,807,995	10,626,810	11,415,066	12,695,912	14,369,887
Yukon	143,809	142,486	159,488	175,033	187,730
Money Orders Paid in—	No.	No.	No.	No.	No.
Canada	**12,215,611**	**12,228,783**	**12,549,695**	**13,080,556**	**13,830,795**
Prince Edward Island	43,041	41,686	42,386	44,378	46,608
Nova Scotia	538,841	562,941	557,860	563,167	614,436
New Brunswick	774,924	777,627	792,991	817,643	880,207
Quebec	1,541,862	1,563,062	1,657,924	1,784,960	2,005,105
Ontario	3,906,095	3,922,944	3,957,563	4,152,562	4,563,271
Manitoba	2,688,168	2,604,349	2,706,591	2,732,859	2,671,919
Saskatchewan	1,473,521	1,459,678	1,477,281	1,511,159	1,442,129
Alberta	640,394	656,848	679,123	740,803	777,826
British Columbia	607,896	638,887	677,186	732,245	828,426
Yukon	869	761	790	780	868
Value of Money Orders Paid in—	$	$	$	$	$
Canada	**106,908,174**	**114,054,602**	**120,725,752**	**131,257,438**	**142,150,074**
Prince Edward Island	557,281	538,204	545,660	588,953	615,494
Nova Scotia	5,131,281	5,530,006	5,741,560	6,096,036	6,737,362
New Brunswick	6,186,968	6,553,543	6,755,746	7,104,652	7,982,825
Quebec	13,966,669	15,152,171	16,185,467	18,180,150	21,596,168
Ontario	32,529,477	34,734,816	36,288,177	39,787,824	45,423,340
Manitoba	21,378,560	22,091,686	23,313,484	24,396,689	23,862,224
Saskatchewan	12,194,519	12,860,754	14,298,781	15,553,218	13,849,133
Alberta	8,061,119	8,984,483	9,428,761	10,391,350	11,544,441
British Columbia	6,887,535	7,594,163	8,151,767	9,144,277	10,522,072
Yukon	14,765	14,776	16,349	14,289	17,015
Postal Notes—					
Total notes paid No.	5,115,761	5,772,119	6,730,361	7,077,540	7,295,649
Total value, including postal note stamps affixed $	9,247,459	10,246,800	11,374,903	12,020,467	12,486,657

Air-Mail Services.—The total weight of mail carried by air throughout Canada during the year ended Mar. 31, 1938, was 1,368,246 lb., while the mileage flown was 1,474,230.

An interesting feature of the returns is the continued volume of mail carried by air into the several mining districts, and there would seem to be little doubt that aerial postal communication contributes materially to the development of Canada's natural resources.

6.—Mileage Flown and Weight of Mail Carried by Air, fiscal year 1938.

Service.	Distance.	Trips Performed.[1]	Mileage Travelled.	Weight of Mail Carried.
	miles.	No.	miles.	lb.
Atlin-Telegraph Creek	146	22	3,212	5,162
Central Manitoba and Northern Ontario Mining Areas–				
Kenora–Red Lake[2]	105	454	47,660	99,120
Sioux Lookout–Casummit Lake	212[3]	286	29,616	36,749
Sioux Lookout–Red Lake	116	371	42,848	30,179
Winnipeg–Diana (Central Manitoba)	148	595	65,883	93,976
Charlottetown–Magdalen Islands	106	84	8,904	28,675
Dryden–Gold Rock[4]	35	230	8,050	8,207
Edmonton–Fort St. John	443	104	46,072	15,971
Edmonton–White Horse[5]	957	77	73,077	2,275
Fort St. John–Fort Nelson	190	35	6,650	3,764
Gods Lake–Cross Lake–Norway House[6]	177	26	4,567	3,909
Haileybury–Belleterre[7]	50	107	5,800	8,904
Ile à la Crosse–La Loche	96	41	3,477	5,503
Ilford–Gods Lake[6]	120	9	1,080	2,361
Ilford–Norway House–Cross Lake[6]	188	5	930	973
Kenora–Golden Arm–Cole[2]	115	443	10,548	12,747
Kenora–Red Lake–Cole[2]	125	90	5,880	9,204
Kenora–Whitefish Bay	40	96	4,280	5,475
Leamington–Pelee Island	22	178	3,916	28,401
Mackenzie River District[8]—				
Cameron Bay–Coppermine	165	869	238,272	116,009
Fort Chipewyan–Goldfields	108			
Fort McMurray–Aklavik	1,459			
Fort Resolution–Port Radium	428			
Goldfields–Fond du Lac	42			
Edmonton–Fort McMurray–Goldfields	496			
Moncton–Charlottetown	100	625	62,500	255,513
Montreal–Albany	200	280	56,938	41,547
Montreal–Burlington[9]	73	194	14,162	1,094
Montreal–New York[10]	134	115	37,676	2,976
Montreal–Rimouski	309·5	57	17,165	31,511
North Shore—				
Quebec–Rimouski	175	28	4,900	2,649
Rimouski–Sept Iles	183	96	17,568	45,153
Sept Iles–Natashquan	205	54	12,764	24,358
Natashquan–Harrington Harbour	112	16	1,792	3,862
Havre St. Pierre–Port Menier	45·5	16	728	5,715
Rimouski–Baie Comeau[11]	67·6	86	5,790	19,285
Special flights	Varied.	34	6,991	13,862
Oskelaneo–Chibougamau[12]	130	68	8,840	4,840
Ottawa–Montreal[13]	108	392	42,336	2,771
Prince Albert–Goldfields[14]	465	41	19,065	5,213
Prince Albert–Ile à la Crosse–	177	191	29,503	29,022
Lac la Ronge	133			
Prince Albert–Stoney Rapids[14]	515	169	72,742	25,145
Prince George–Ft. Grahame–Ware[15]	275	18	3,846	4,152
Prince George–Takla Landing[16]	389[3]	88	16,350	18,367
Sioux Lookout–Central Patricia	125	539	67,375	77,113
The Pas–Cumberland House[17]	70	36	2,520	3,568
The Pas–Herb Lake[18]	95	124	11,780	20,548
Vancouver–Seattle	122	633	77,226	48,584
White Horse–Dawson[19]	309	64	18,336	1,395
Winnipeg–Gods Lake and Ilford	795[3]	159	58,257	70,973
Winnipeg–Pembina–Fargo[20]	210	881	76,250	42,041
Winnipeg–Red Lake	170	503	59,061	23,797
Winnipeg–Vancouver[21]	1,180	46	38,484	15,792
Special flights	Varied.	99	22,563	9,836
Totals	-	**9,774**	**1,474,230**	**1,368,246**

---

[1] Extra trips performed at contractors' convenience. [2] Superseded by Kenora-Red Lake-Cole Mar. 1, 1938. [3] Round trip. [4] Inaugurated May 17, 1937, and superseded by land service Nov. 12, 1937. [5] Inaugurated July 5, 1937. [6] Superseded by Ilford-Norway House-Cross Lake, Mar. 1, 1938. [7] Superseded by land service Nov. 4, 1937. [8] Edmonton-Goldfields added to new contract starting Nov. 1, 1937. [9] Inaugurated Aug. 10, 1937. [10] Performed from May 15, 1937, to Sept. 30, 1937. [11] Inaugurated at close of navigation in December, 1937. [12] Discontinued Oct. 26, 1937. [13] Discontinued Feb. 15, 1938. [14] Superseded by Prince Albert–Stoney Rapids *via* Goldfields, Fond du Lac, and Norite Bay, July 12, 1937. [15] Extended to Ware Mar. 12, 1938. [16] Germansen Landing added as point of call Jan. 26, 1938. [17] Inaugurated Sept. 8, 1937. [18] Inaugurated Aug. 17, 1937. [19] Inaugurated November, 1937. [20] Extended to Fargo October, 1937. [21] Experimental service started Mar. 1, 1938.

PART IX.—THE PRESS.*

The desirability of including in this chapter of the Year Book an article dealing with the role of the press in the economic and social development of Canada has been under consideration for several years. The compilation of such a survey in the space that can be spared is not an easy task, owing to the great breadth of the subject and the complexity of the interrelationships of the modern press. Indeed, it would be impossible in such an article to trace throughout their history the relationships of the many newspapers existing to-day. However, it is felt that a useful purpose may still be served by emphasizing major trends and tendencies, that have influenced the development of the press as a whole, against a historical background that shows the beginnings of journalism in each section of the country.

The purpose of the following article, then, is to trace from the small but important individual pioneer efforts the growth of the huge interrelated modern organization of to-day, and incidentally to try to point to the direction in which present tendencies are leading.

This Part has therefore been planned in two sections along the following lines:—

Section 1, where the development of the press in Canada is treated, such treatment having been arranged under the following subdivisions:—

(1) A short introduction.

(2) A review of the beginnings of journalism in each section of the country, tracing such beginnings down to about the middle of the nineteenth century, from which time the modern press may be said to date.

(3) The transition period leading to the evolution of the modern newspaper press.

(4) The development of co-operation.

(5) The influences that have affected the development of the modern press, and present-day tendencies.

(In subdivisions 3, 4, and 5, the modern press is treated, not so much as a number of individual papers and journals, although this angle is not forgotten nor lost, but more from the standpoint of the organized machinery that has developed to unify and co-ordinate the individual units.)

Section 2 gives detailed statistics of the daily papers, weekly papers, magazines, and miscellaneous publications, followed by a series of general comparative tables all of which are designed to show the present statistical picture and the growth of the modern press.

Section 1.—The Development of the Press in Canada.

Introduction.

The press of all lands has, of course, from the first, been a very important factor in carrying information to the people and in crystallizing and expressing public opinion on current questions, but in no period of history has it been so important an influence as it is to-day. Its power in this regard is generally understood to be enormous, but, as is always the case where such potency is concentrated in human institutions, it may be used either constructively or destructively.

History shows how time and again, in many countries, the influence of the press has been perverted to achieve selfish aims. On the other hand, the modern British tradition of "a free press" has proved one of the bulwarks of democracy. Naturally, the traditional background upon which the press has been developed in Canada is therefore of first importance. It is sometimes forgotten by those who have grown up in modern days that free expression of views in printers' ink was not always possible and that the press has had to fight bitterly and long for the rights which are regarded as commonplace to-day.

---

* Prepared under the direction of the Dominion Statistician by A. E. Millward, B.A., B.Com.

True, the basic British tradition of a free press had been established in Great Britain prior to the rise of journalism in Canada and the progress thus made passed in due course into the fabric of tradition. But, notwithstanding this, Canadian publishers had their own battles to fight, their own problems to solve, and their own set of traditions to build on that foundation. In doing this they have been influenced profoundly by two forces: on the one hand, the conservative qualities and literary standards of British newspapers of the better type to which they were traditionally sympathetic; and on the other, the strong tendencies of the new-world press to sensational journalism and a catering to popular taste in order to build up circulation and financial independence. The present-day Canadian newspaper is, on the whole, a creditable product in which both influences have played their parts.

From its beginnings the Canadian press has developed along individualistic lines, although to-day, because of vast changes in modern journalistic methods, strong personalities are not associated so directly with their publications or projected so forcibly into the public eye as was the case in the eighteenth and nineteenth centuries.

According to *McKim's Directory* for 1939, the Dominion, in 1938, supported 1,804 newspapers and periodicals, of which 112 are issued daily. Ontario had 660, or 36 p.c. of the total. Quebec with 387 does not seem to occupy the place the population of the province warrants, but one French paper, *La Presse*, boasts the third largest circulation of any paper in Canada and the Montreal *Star* ranks fourth in this respect among the English papers of the Dominion. However, circulation figures of French-Canadian periodicals (daily, weekly, or monthly) do not provide an absolute yardstick for measuring the reading habits of the French-Canadian population for the following reasons:—

(1) French-Canadians are, on the whole, more bilingual in their reading habits than English-speaking Canadians. A large number of French-Canadian families in Montreal, Quebec, or Ottawa do not limit themselves to French papers exclusively. The average French-Canadian business man will buy at least two French and one or two English local papers every day. In Ottawa, for example, many French readers get all three of the local daily papers, of which only one is French.

(2) In nearly every family of the more literary class is to be found one or two publications from Paris.

(3) As in the case of the English-speaking population, the French-Canadian reading public are not immune from the attraction of the large American periodicals and the most popular of these are to be found even in remote villages.

The Beginnings of Journalism in Canada.

NEWSPAPERS.

The art of printing from movable type invented by Gutenberg of Mainz swept over the countries of western Europe in the 20's of the fifteenth century with the force of a renascence, but was naturally much later in penetrating the pioneer colonies of North America. By the middle of the eighteenth century, however, it had become well established in the New England colonies. The art had become deeply rooted in Massachusetts especially, and it was from Boston that, in 1751, Bartholomew Green, Jr., brought the first printing press to what is now Canada. At the mature age of fifty years he began his life anew in Halifax, and, although he was destined to live for but a few weeks after his arrival, this event gave Canada the inestimable benefits of type-printing and for this reason alone is of historic importance. It was Green's immediate successor, one John Bushell, an associate, also from Boston, who laid the foundations of Canadian journalism, for it was due to his enterprise that the Halifax *Gazette* was established in 1752.

To appreciate the background of early Canadian journalism, the reader must understand something of the conditions under which the early pioneer journalists worked.

The editors and publishers of Canada's early papers were outstanding local leaders; journalism was a strong formative social force in local centres and guided community development. In such times newspaper publication, though a small business, was a tremendously important influence. Nevertheless, circulation was definitely restricted by the difficulties of communication and transportation, the limitations of pioneer life, the isolation of the communities served, the expense of publication, and the relatively low average standard of literacy. The editor in this period was often the actual news-gatherer as well as writer of much of the material which found its place in the columns of his paper, for news from the outside world was difficult to get; he was frequently compositor, proof-reader, printer, and distribution agency all in one—a strong individualist by temperament, he was inclined to be a reformer or radical in politics.

The expense of printing by the tedious processes then in vogue and the limited revenues obtainable from subscriptions and advertising, restricted early publications to weekly or, at best, semi-weekly editions. Indeed, the passage from the weekly to the daily paper was a very gradual process in Canada and was made possible only by the growth of large urban centres. Because of these difficulties, early papers were, generally speaking, dependent on outside assistance to a substantial degree, although there were several examples of papers which fought through without any such aid. It was well for Canadian journalism generally that able men sponsored early efforts and sought the widening influence of the press to express their views.

In these circumstances, it is a matter of note that the early press in the Maritimes and in Lower and Upper Canada retained so much of rugged individualism and willingness to fight, even at the expense of survival, for its independence and rights whenever these were challenged, for in the upheavals of Canada's early history writers of skill and great journalistic ability rose and fell with the tides of political unrest. These early journalists have left their impress on the scroll of Canada's history and many of them in their later days became outstanding political figures, for journalism naturally opened the gateway to politics.

A few of the galaxy of outstanding journalistic figures up to the middle of the nineteenth century were:—

The Maritimes—Joseph Howe (later the Hon.); John Sparrow Thompson (father of a Canadian Prime Minister); G. E. Fenety; H. D. Blackader; William Annand (later the Hon.); and Jonathan McCully (later the Hon. and one of the Fathers of Confederation). *Lower Canada*—Fleury de Mesplet; the Hon. Pierre Bédard; Etienne Parent; Jean Baptiste Eric Dorion (with whom were associated Papin, Daoust, Blanchet, and others); John Melton; John Lowe (later Deputy Minister of Agriculture at Ottawa); and B. Chamberlin (later Queen's Printer at Ottawa). *Upper Canada*—William Lyon Mackenzie; Thomas Dalton; Hagarty (later Sir John and Chief Justice); Hincks (later Sir Francis); William Macdougall (later the Hon.); and Hugh Scobie, Peter Brown and his son George Brown of the *Globe*.

The Maritime Provinces.—As mentioned on p. 739, the Halifax *Gazette*, established in 1752 by John Bushell, was the first paper to be published in what is now the Dominion of Canada. At that time the *Gazette* was merely a leaflet (a half-sheet of foolscap, both sides printed) which provided the early colonists of Nova Scotia with a weekly summary of news and important events. Although anything but impressive in appearance, it was the humble seed from which the sturdy growth of Canadian journalism has since developed.

At this time in her history, the British and German population of Nova Scotia is recorded as only 4,203, having increased from the 2,544 British emigrants brought to Halifax in 1749 by Cornwallis. The subscription price to the *Gazette* was twenty shillings a year and the number of original subscribers was 72: after misfortune, which resulted in the withdrawal of official patronage, the Halifax *Gazette*, then under the proprietorship of Anthony Henry, a former partner of Bushell, ceased operations under that name in 1766. A rival newspaper, the Nova Scotia *Gazette*, took its place and secured the official patronage in the same year.

In 1769 the Nova Scotia *Chronicle and Weekly Advertiser* was established by Henry, who would not admit defeat in spite of his earlier reverses. This paper was more liberal in outlook than its rival and was offered at an appreciably lower price; it soon became more popular than the *Gazette* and later (1770) gained control of, and was incorporated with it as the Nova Scotia *Gazette and Weekly Chronicle*, which, still under Henry, became the official organ.

The next newspaper in the Maritimes was the Halifax *Journal*, which was established by another Bostonian in the person of John Howe (father of the Hon. Joseph Howe) who was for many years the leading printer in the Maritime Provinces. This paper was published in 1781 and had a continuous existence for ninety years. In the 1780's three solidly established newspapers were appearing in the city of Halifax alone and the little town of Shelburne supported three others. Halifax kept the lead in Canadian journalism for a long time and, while overtaken later by Toronto, the brightness of its record is undimmed. In 1783 the *Royal Saint John Gazette and Nova Scotia Intelligencer* was founded. New Brunswick was then a part of Nova Scotia but, when it became a separate colony in the following year, the name of the paper was changed to *Royal New Brunswick Gazette and General Advertiser*: this was an official organ used for official notices as well as news.

Another New Brunswick paper was the *Morning News* of 1839, which championed popular rights along the lines of Howe's *Nova Scotian* (see next paragraph). At this time, journalism, in each part of the Maritimes, was closely interconnected, not only in spirit but through the personal relationships of the editors.

In 1828 Joseph Howe, who later became one of the great parliamentarians of Nova Scotia, established the famous *Nova Scotian*; he had formerly been interested in the *Gazette and Weekly Chronicle*, which was now known as the *Acadian*. The *Nova Scotian* changed its name to the *Morning Chronicle* towards the middle of the century and, with its evening edition, the Halifax *Star*, (1873), and many contemporaries (see Tables **1** and **2**) including the Halifax *Herald* (of which the Halifax *Mail* is the evening edition), the Sydney *Post-Record*, and the Glace Bay *Gazette*, still moulds public opinion in that province.

In Prince Edward Island the first paper was the *Royal Gazette* founded in 1791 at Charlottetown: this was an official organ. The first regular unofficial newspaper was the Prince Edward Island *Register* of 1837. The two Prince Edward Island newspapers both with wide circulations to-day, *viz.*, the *Patriot* and *Guardian,* date back to 1857 and 1891, respectively.

The early Maritime press was notable for its stand in connection with the struggle for the freedom of the press and responsible government, and the outstanding figure in these struggles was Joseph Howe, certainly one of the greatest publicists Canada has had.

Lower Canada.—Journalism in the old Province of Canada began soon after the transfer of Canada to Great Britain. Prior to the cession there had been no regular journals in the Province. The first newspaper to be published here and the second in what is now Canada was the Quebec *Gazette,* founded in 1764, at which time the Halifax *Gazette* had already been in existence for twelve years. The senior proprietor, Wm. Brown, was Scottish-born but came from Philadelphia, and, through his sponsor, Dunlop, had an indirect connection with the great Benjamin Franklin. The paper itself was printed in alternate columns of English and French with the stated purpose of affording "a weekly lesson of improvement to any inhabitant willing to attain to a thorough knowledge in the language of the place different to that of his mother tongue—whether English or French". Three hundred subscriptions at $3 each were obtained before operations were commenced and the paper lived for more than a century under different publishers.

The second paper in the Province of Canada was published in Montreal in 1778. This was also a *Gazette* and attempted to enlist the sympathy of French-Canadians for the American Revolution. Benjamin Franklin, Samuel Chase, and Rev. Charles Carroll were the missionaries deputed to proceed to Montreal for this purpose, but a Frenchman, Joseph Fleury de Mesplet, an editor and printer who had been in the employ of Franklin at Philadelphia and who, incidentally, published the first book to be printed in Montreal, *viz., L'Adoration Perpetuelle* in 1776, was chosen to edit the paper for them. The original plans quickly went awry and Mesplet was left with the equipment. He brought out the *Gazette du Commerce et Littèraire* from the celebrated Château de Ramezay as a paper of four eight-column quarto pages, printed in French. The first number was taken up entirely with literary selections, moral and amusing anecdotes, etc., owing to the dearth of commercial intelligence. Indeed there was very little general news in the first issues, and the editor apparently had difficulty in publishing accounts of current events without giving offence to those in authority, who in the end proved too strong for him.

In 1779 Mesplet was arrested and the publication of his paper was suspended but it appears to have been resumed in 1785. By 1788 the *Gazette* had made much progress; the page was now enlarged from quarto to foolscap and printed in double columns in both languages. It was at this time that the paper took on the character of a true newspaper, though literary features were not entirely neglected. Mesplet published the *Gazette* until 1789. About 1794, Lewis Roy, who had established the *Upper Canada Gazette* in 1793, appears to have been associated with the Montreal paper, and in 1795 it passed into the hands of Thomas A. Turner. In 1816-17 James Brown, the pioneer in paper-making in Canada (see p. 752), was its publisher and printer, and the format was again changed. Under the proprietorship of Robert Abraham, who took the paper over in 1844, it became a daily in summer and a tri-weekly in winter and began to take on its modern form. It has since grown to be one of the most prominent and respected papers in the country.

Seven newspapers were founded in Lower Canada before 1800; in 1824 there were 12 newspapers published in Lower Canada—4 in Quebec city, 7 in Montreal, and 1 in Stanstead; but fifty years later, *viz.*, in 1874, there were 88 newspapers and periodicals of all kinds published in the province of Quebec. The history of journalism in Quebec presents a complex and ever-changing picture due to the differences in religion, language, and race. It is next to impossible to trace the intricate changes in management and form which characterize the French language papers, such as *La Canadienne* (1806), *La Minerve* (1826—the publishers were exiled after the Revolution of 1837), *L'Avenir* (1848), *La Pays* (1851), *L'Evènement* (1867), *La Patrie* (1878), *Le Soleil* (1882), *L'Etendard* (1883), and *La Presse* (1884). Of these early French papers only *L'Evènement*, *La Patrie*, *Le Soleil*, and *La Presse* remain to-day. *La Presse* is now, in fact, the third largest paper in regard to circulation in Canada (see Table **1**). Taking into account the disadvantages under which they laboured, the French papers have shown comparable progress, initiative, and enterprise with their English contemporaries.

Reverting to the English papers, in 1805 the Quebec *Mercury* was established and survived for nearly one hundred years; in 1811 the Montreal *Herald* was founded and in 1846 the Montreal *Witness*. Meanwhile, a strong provincial press had grown up in the Eastern Townships, where the *Farmers' and Mechanics' Journal and Eastern Townships Gazette* had been founded in 1834. In 1838 this paper became the Sherbrooke *Gazette*. In 1833 the Montreal *Daily Advertiser* had been founded, the first daily paper to be published in what is now Canada.

Upper Canada.—The first paper in what is now Ontario was the *Upper Canada Gazette and the American Oracle*, published in 1793 at Newark (now Niagara) by Lewis Roy, a Frenchman from Quebec, who in the following year succeeded, temporarily, to the editorship of the Montreal *Gazette*. In 1799 when the seat of Government was transferred to York (now Toronto), this paper followed the Government and continued to be published there until 1813. The *Canada Constellation* occupied the field which the *Gazette and Oracle* had filled in Niagara, but later gave way to the Niagara *Herald* (1800).

From 1800, Toronto (then York) became the centre of experimental journalism in Upper Canada. Many short-lived attempts to establish papers were made in the early years of the nineteenth century against very great difficulties, but the *Upper Canada Gazette* was the chief survivor. It depended mainly on New York papers for its British and foreign news and the difficulties with which it had to contend are indicated by the circumstance that it made its appearance on wrapping paper on more than one occasion. The *Gazette* finally ceased publication in 1813, when invaders from the United States scattered its type and destroyed its press. As the *Weekly Register* it was revived in 1817. Meanwhile the *Upper Canada Guardian and Freeman's Journal* had been established in 1807 as an opposition paper. The *Observer*, founded in 1820, supported the administration.

The *Colonial Advocate*, edited by William Lyon Mackenzie, appeared in 1824, also as an opposition paper. It was at first printed at Lewiston, New York, but circulated in York. In 1831 the *Courier* was established and, in 1833, Thomas Dalton founded the *Patriot* as a strong Conservative paper.

In the period following the Rebellion of 1837, journalism in Upper Canada entered a second phase. The experimental stage had now ended and this second period leads directly to the modern journalism of to-day. We are now brought face to face with personalities like Hincks (later Sir Francis) who established the *Examiner*, and Hugh Scobie, who established the *Colonist*, both in 1838; Peter Brown, the founder of the *Banner* in 1843; George Brown (his son), who established the Toronto *Globe* in 1844; and James Beaty who founded the *Leader* as a moderate reform paper in 1852. The *Daily Telegraph* came along in 1866 and the *Evening Telegram* (one of the most successful papers in Canada) ten years later, both founded by John Ross Robertson, but these, with the *Mail*, the *Evening News*, and the *Star*, belong to the transition phase leading to the modern period (see p. 745).

Prairie Provinces.—The beginnings of the press in Eastern Canada have been followed in outline down to the middle of the nineteenth century. At this time papers were appearing in even the smaller settlements in the Canadas and the Maritimes, but the spread to the West was just beginning. In Fort Garry, the chief post of the Hudson's Bay Company, but at that time a mere hamlet, the *Nor'-Wester* had its inception as a result of the enterprise of two Ontario newspapermen, William Buckingham, afterwards secretary to the Hon. Alex Mackenzie, an English and Ontario journalist of experience, and Wm. Coldwell of the Toronto *Leader*. T. D'Arcy McGee was its Ottawa correspondent. It appeared in 1859 as a four-page weekly and was the leader of public opinion among the colonists of the North-West. This paper ran until 1872.

Other early attempts to establish papers in Manitoba were the *Red River Pioneer*, the *New Nation* (a Fort Garry paper associated with the first Riel Rebellion), the *Manitoban*, and *Le Métis*, 1870 (a French paper which circulated among the half-breeds). The *Manitoban*, which later became the Winnipeg *Free Press*, was founded by W. F. Luxton in 1874 as a weekly and became a daily in 1879. Luxton was the most prominent personality in Manitoban journalistic history and later founded the *Daily Nor'-Wester*, now known as the *Telegram*. One of the first dailies in Winnipeg was the *Herald* of 1877, which, however, lasted for only a couple of months.

The *Saskatchewan Herald*, published in Battleford, was the first paper in what is now the province of Saskatchewan, and was founded in 1876, the year of the organization of the Provisional District of Saskatchewan, by P. G. Laurie, a man of notable character. The Regina *Leader* came on the scene about seven years later; it was edited and owned by Nicholas Flood Davin, a journalist of outstanding capacity.

The Edmonton *Bulletin*, associated with the name of Frank Oliver (later the Hon.), was started in 1880 and was the first paper in what is now Alberta. The Calgary *Herald* edited by John J. Young, quickly followed.

British Columbia.—It has been said that the history of journalism in British Columbia has been the history of pioneering and townsiting. This is more or less the case in all the western provinces, but there is some truth in the statement that the remains of ambitious pioneer journals are far more numerous in the coastal province than on the prairies. The conditions that governed the sudden rise of communities and their equally sudden disappearance among a floating population mainly concerned with mining are the chief reasons for this. To-day British Columbia has, in proportion to its inhabitants, more newspapers than any other province in the Dominion.

The first recorded newspaper of what is now the province of British Columbia was published in Victoria in 1857 and printed from a French font on a French press under the editorship of a Frenchman (Comte Paul de Garis) who left France after the troubles of 1851. This effort lived for only two or three months. In 1858, two publishers from the United States, Messrs. Whitton and Towne, started the Victoria *Gazette*, the first English paper. This was the period of the gold excitement and activity in journalism was stimulated. The Vancouver Island *Gazette* followed the Victoria *Gazette* by only one month, but both these papers died quickly, within the year of publication.

The *British Colonist* was established in December, 1858, and, under the name of the *Colonist*, this paper has remained in the field down to the present day. The first editor and manager of the *British Colonist* was the late Hon. Amon de Cosmos (otherwise John Smith). Later the Hon. John Robson, one of the early premiers of the province, was associated with this paper. The Cariboo *Sentinel*, a small four-page paper which sold for $1 a copy, gave current news of the mining companies of the Cariboo and belated news of all kinds to the miners of the district. It was established in the 1860's soon after the Cariboo gold-fields were discovered.

The years between 1860 and 1880 (which belong to the modern period) were very prolific as regards new ventures, but many of the newspapers then established passed away after a brief existence. In the early 'eighties the Victoria *Times* came into the picture and is worthy of special note. This paper has extended its sway and is, to-day, an active force in the province. The Hon. William Templeman, another example of the successful combination of journalism and politics, was the first editor and later became proprietor.

MAGAZINES.

Among the magazines to be published prior to 1850 in what is now Canada were:—

The *Nova Scotia Magazine*, published at Halifax in 1789; the *Quebec Magazine* in 1791; *l'Abeille Canadienne*, 1818-19; the (Montreal) *Canadian Magazine*, started in 1823 but discontinued in 1825 after the issue of the twenty-fourth number; the *Canadian Review* (Montreal) 1824-26, an ambitious journal which gave to its readers 240 pages of good reading each month and followed the English pattern of literary reviews; the *Bibliothèque Canadienne*, 1825 (continued as *L'Observateur* in 1830 and as *Magazin du Bas Canada* in 1832); the *Acadian Magazine or Literary Mirror* (Halifax), 1826; the [York (Toronto)] *Canadian Magazine*, 1833; the *Literary Garland* (Montreal), 1838-51, a magazine which, though less ambitious than several of its contemporaries, had more vitality and numbered many outstanding literary figures among its contributors; the *Monthly Review* (Montreal), 1841; *Revue Canadienne* (Montreal), 1845; *Barker's Canadian Magazine* (Kingston), 1846; *Snow Drop* (Montreal), 1847, a well-conducted child's magazine; *Victoria Magazine* (Belleville) 1847; and *Repertoire National* (Montreal), 1848.

It will be noticed that ten of the above fifteen magazines originated in Lower Canada; this does not mean, however, that their circulations were limited to that area, for Montreal was a publicity centre for Upper Canada also.

The Transition Period Leading to the Evolution of the Modern Newspaper Press.

The beginnings of journalism outlined above were followed by a period of reconstruction and change which led directly to the modern period.

This phase of journalistic development cannot be chronologically defined but may be said, roughly, to have preceded Confederation by about fifteen years and extended to between 1880 and 1890. It was characterized by the appearance first in Ontario of the large metropolitan or city 'dailies' that ultimately developed through tedious and difficult stages—for the independent national type of paper did not spring into being all at once—into strictly business enterprises, as distinct from local party organs. It was a time when the widening demands and tastes of readers as well as economic trends were forcing steadily mounting expenditures on newspaper editors to finance larger staffs, better news services, and added features. Control and management of a city daily as a 'business unit' and on a national basis in turn fostered a willingness of editors to co-operate to secure expensive services and safe-guard their own vital interests.

The Toronto *Globe* was one of the earliest newspapers in this class, but other large dailies that made their appearance in Ontario during this pioneering period or were a part of it included the *Daily Telegraph* (1866), the *Evening Telegram* (1876), the *Mail* (1872), and the *Evening News* (1880). (Short reference has already been made to these on page 743.) The *World* [1880-1922 (?)] is noteworthy because of the new influences it brought to bear on Canadian morning journalism. The Macleans (W. F. Maclean, M.P., and his brother, James Maclean) made an excellent newspaper team. They were independent in their outlook and reputed to be among the best paragraphers of their day. They introduced new standards somewhat along the lines of the 'tabloids', and several other morning papers followed their lead to some extent. The Toronto *Star* (1892) also belongs to this group of pioneer papers.

In Quebec the Montreal *Star*, founded by Graham, Scott, and Lanigan as a one-cent paper in 1869, and *La Presse* (1884) were established in this period. As has been noted, the Montreal *Gazette* had developed into a daily by this time and, under the editorship of R. S. White (1886-1896) was kept in the vanguard of progress. The Montreal *Herald* (1811) also reached a high point of its success between 1870 and 1885 under the able editorship of Hon. E. Goff Penny.

Leading papers in the Maritimes and Western Canada, such as the *Chronicle* (1844), the *Herald* (1873), the *Star* (1873), and the *Mail* (1878), all of Halifax, and the Saint John *Telegraph-Journal* (1868) in the Maritimes, and the Winnipeg *Free Press* (1874), the Regina *Leader-Post* (1883), the Calgary *Herald* (1880), the Edmonton *Bulletin* (1880), the Victoria *Colonist* (1858), and the Vancouver *Sun* (1886) of Western Canada, were obliged by the forces of competition to fall into line with the movement and gradually there emerged the national press along modern lines, the main characteristics of which are developed in the next section.

The trend toward large scale production and the increasing financial obligations involved in the production of a modern daily newspaper are illustrated in the case of Toronto daily newspapers which in the present century have shown a reduction in number of from six to three [excluding the *Clarion* and the *Hebrew Journal* (Yiddish)]. But these three have an enormously greater aggregate circulation than the six had in 1901.

The Development of Co-operation.

After the press had once become well established in the various sections of British North America, progress was rapid. No combined statistics are available prior to Confederation, but there do not appear to have been more than between 150 and 200 periodicals in circulation in 1850. McKim's *Canadian Newspaper Directory* (1892) published an estimate for the year 1864, when there were stated to be 22 dailies, 220 weeklies, 27 monthlies, and 44 mixed papers in circulation; in 1874 there were 46 dailies, 325 weeklies, 41 monthlies, and an unreported number of mixed papers; in 1881, according to Rowell's *American Newspaper Directory*, there were 61 dailies, 407 weeklies, 58 monthlies, and 41 mixed papers; and by 1891, McKim's *Directory* gave 97 dailies, 653 weeklies, and 217 monthlies.

The weekly, a source of local news in small towns and villages which were springing up rapidly in this period, shows a strong and sustained growth, but the monthly periodical, which in the final decade of the period jumped from 58 to 217, makes the most remarkable showing and indicates the widened appeal of this form of publication. The statistics of Table 4 continue the record annually from 1921 to 1938, and it will be noted that the numbers of weeklies and monthlies have continued to increase more rapidly than the dailies. The influences which have worked to produce this result are touched on at p. 755.

In every department of newspaper work—mechanical, news-gathering, business, advertising, and editorial—wonderful progress has been made by the press, especially during the latest fifty years. Moderating and rationalizing influences have been at work from within the press itself, and these, together with the benefits which co-operation has brought, have resulted in raising the tone and influence of the press without unduly undermining its vigour or unnecessarily impairing individuality.

Co-operation for General Aims.*—After the middle of the nineteenth century, the advantages to be attained by co-operative effort, not only from the standpoint of self-protection but equally in promoting personal contact between editors in different parts of the country and later the pooling of news-gathering facilities, became a much desired objective of more influential editors.

The earliest attempt at newspaper co-operation in Canada was the organization of the Canadian Press Association at Kingston in September, 1859, at a time when Canada was still one province under the United Parliament, though in fact two separate communities weakly bound together and characterized by political and social disunion.

In these days of the small local paper the development of a united press presented almost insuperable difficulties, for such a press at such a time in the country's history did not lend itself to organization, while the strong individualism of many editors, as well as the expense and time involved in attending meetings at times when travel was difficult, made them somewhat deaf to appeals for co-operation.

That such deep-seated opposition was partially overcome by 1859 was a tribute to the untiring efforts of the editors of leading papers of the day. The following newspapers were represented in the organization of proceedings at Kingston: the Hamilton *Spectator*, the Kingston *Whig*, the Belleville *Intelligencer*, the Brockville *Recorder*, the Cornwall *Freeholder*, the Montreal *Echo*, the Milton *Journal*, the Barrie *Advance*, the Montreal *Gazette*, the Picton *Times*, the Belleville *Independent*, the Kingston *Herald*, the Whitby *Watchman*, the Napanee *Standard*, the Milton *New Era*, the Dundas *Banner*, and the Kingston *News*.

The new Association at first commanded the support of a considerable number of journalists in Upper Canada, but in Lower Canada even among writers of the English press it was not at first a factor. The Association extended its influence, however, as time went on, and by the early part of the twentieth century had shown substantial growth and increased prestige; but its name was still a misnomer, inasmuch as membership was confined almost entirely to the two central provinces. It is important to note that at this stage the Association was an unincorporated body that functioned as a fraternal semi-professional group of newspaper men, without paid staff or central office; it met annually for the discussion of the ethics and problems of newspaper work, and owed its success to the splendid service rendered by its officers and executive committee, as well as by individual members.

---

* The information under this heading has been prepared from material supplied by John M. Imrie, Managing Director, Edmonton *Journal*; A. Partridge, Manager, Canadian Daily Newspaper Associations, Toronto; and C. V. Charters, Managing Director, Canadian Weekly Newspapers Association, Brampton, Ont.

As stated in the summary records of the Association, the purpose was primarily the promotion of friendly feeling and social intercourse among members and not the pooling of news-gathering facilities or self-protection; the latter were objectives of organization which came later. The list of Honorary Secretaries of the Association contains many names well known and highly regarded. Among these are: Col. J. B. MacLean (1890, 1891, and 1894); J. E. Atkinson (1892-93); Col. John A. Cooper (1895-1901); the late Joseph T. Clark (1902-04); the late John R. Bone (1905-10); and J. H. Cranston (1910-11).

Organizations whose purposes were similar to those of the Canadian Press Association were formed elsewhere in Canada and by 1911 three others were functioning as follows: the Maritime Press Association, in the Maritime Provinces; the Western Canada Press Association, in Manitoba and Saskatchewan; and the Alberta and Eastern British Columbia Press Association, in the area designated in the title. In this same year (1911) it was decided to establish the Canadian Press Association on a business basis with paid staff and central office and to endeavour to bring about a merging with it of the three other Associations. Mr. John M. Imrie, now managing Director of the Edmonton *Journal*, was the first Secretary-Manager of the re-organized Association. By the end of 1912 the influence of the Canadian Press Association was Dominion-wide and in 1913 application was made for incorporation under Dominion charter.

After that year the Canadian Press Association was known as the Canadian Press Association, Inc. The newspaper rather than the individual now became the basis of membership and fees were changed from $2 per year to a graduated scale, depending on the importance of the paper, ranging up to $120 per year. There followed a steady and substantial enlargement in service to members, including: a standard of practice in matters relating to advertising; a standard for the guidance of members in the censorship of advertising 'copy'; collection of overdue accounts; promotion of advertising; credit information; and co-operative purchasing of newsprint and assistance to members in negotiations with mechanical unions. Membership was divided into three sections, *viz.*, the Daily Newspaper Section; the Weekly Newspaper Section; and the Trade and Magazine Section. Each had its own chairman and executive committee and over all was a president and board of directors.

During the War, the Canadian Press Association, Inc., co-operated with various Departments of the Dominion Government and certain Provincial Governments in the utilization of promotional advertising in the work of government. It co-operated actively with the Minister of Finance and the National Bondholders Committee in the floating of several Victory and other War loans. On the initiative of the Association, government control of supply and price of newsprint was instituted half way through the War and continued for three years in order to cope with an acute situation which had developed.

In 1919 membership of the Association was approximately 900 as compared with 390 in 1910; the increasing services and the more marked specialization and divergence of interests between the different sections brought to the fore the question of the re-organization of the Association into three separate associations serving respectively the daily, the weekly, and the trade and magazine papers; a central bureau, it was felt, could no longer handle all these interests adequately and with justice to each, while at the same time there was a strong feeling of loyalty to the parent association which all members desired should continue.

The separation was finally decided upon in 1919 and on Jan. 1, 1920, the Canadian Daily Newspapers Association, the Canadian Weekly Newspapers Association, and the Canadian National Newspapers and Periodicals Association commenced their separate and distinct existences; each inherited the traditions of the parent body and the expanded services which have developed have been built around the nucleus of the earlier organization. Indeed this nucleus still exists, although the fact is not generally known. The senior and parent organization is now represented by a president, a secretary, a nominal bank account (which has not been added to or reduced in twenty years) and a board of directors, elected dutifully year after year by the Canadian Daily Newspapers Association if not by the others of the original three—an indication of the regard in which sentiment and tradition are held by the press.

The objects of the individual associations in general are the same although of course adapted to the particular needs of each. They embrace:—

(1) The elevation of the standard of newspaper writing and publishing;
(2) The distribution of pertinent information of interest to members;
(3) The protection of the business interests of members, such as advertising, job printing, circulation, subscription rates, paper supplies, etc.;
(4) Protection of members from unjust and unlawful exactions.

Each association has its own executive organization and appoints standing committees to deal with specialized sections of its work.

*French Canadian Co-operation for General Aims.**—The first successful effort at co-operation of the French-Canadian press was made in 1932, following the meeting of the editors of about fifteen rural weeklies at Three Rivers, Que. Messrs. Labranche and St-Arnaud, who then edited *La Chronique Trifluvienne*, were instrumental in starting the movement. The name adopted by the founders of the new association was "l'Association des Journaux ruraux de langue française d'Amérique", but this was changed to "Association des Hebdomadaires Canadiens-Français" in 1935. The Association, duly incorporated by Quebec charter, had at Nov. 30, 1938, a membership of 33 (or about 55 p.c. of the total French weeklies of Quebec province outside the city and community weeklies). The Association des Hebdomadaires Canadiens-Français, though a relatively new organization in the co-operative field, has contributed substantially to the improvement of the Quebec weeklies, especially as regards betterment of make-up, editorials, captions, illustrations, and advertising policy. It has also championed the interests of its members in many ways.

A new venture is being tried out by the French rural press: that of the syndicate or chain papers. The attempt seems full of promise in the lower St. Lawrence valley and the Eastern Townships.

Co-operation for Circulation Audits.†—The growth of advertising and the desire of the advertiser for some reliable means of gauging the effectiveness of the space bought, as well as the keen competition on the part of publishers to increase their revenues by selling as much space as possible, led to the necessity for measuring the circulation of the various types of publications.

---

*Summarized from material furnished by Edouard Hains, Business Manager of the Association des Hebdomadaires Canadiens-Français.

†Summarized from *Marketing* for Oct. 15, 1938.

As far back as 1899 advertising men with vision tried to find some remedy for the chaotic situation then existing with regard to circulation estimates, but, although several plans were tried out, they were only partially successful. It was not until the organization of a bureau embracing all forms of publishing and advertising was suggested in 1913 that the idea met with the whole-hearted response necessary to its ultimate success.

Early in 1914 the Audit Bureau of Circulations was organized to include advertisers and publishers of the North American Continent; it met with enthusiastic response in Canada. This is a co-operative non-profit organization, conducted entirely in the interests of its members, and engaged solely in the collection and verification of information on circulations which it publishes in the form of standardized reports to its members.

Several Canadian newspaper publishers took an active part in the formation of the Bureau, and among the charter members are listed: the Calgary *News-Telegram*, the Edmonton *Journal*, the Vancouver *World*, the Halifax *Herald and Mail*, the Kitchener *News Record*, the Kingston *British Whig*, the London *Free Press*, the Stratford *Herald*, and the Moose Jaw *Times*. Canadian magazines are represented by the *Canadian Monthly* (London, Ont.) and farm papers by the *Grain Growers' Guide* (Winnipeg) and *Canadian Farm* (Toronto). The first Canadian advertiser member was the Canadian Pacific Railway. Before the end of 1915 about thirty-five other papers had joined the Bureau and since then the growth in Canada has been steady. To-day, Canadian membership includes 88 newspapers, 20 magazines, 7 business papers, 13 farm papers, and 17 advertising agencies, while 19 other advertisers support the Bureau by holding advertiser memberships. The total membership of the Audit Bureau of Circulation is (December, 1938), about 2,000 members, of which number about 1,600 are publishers.

Co-operation for News-Gathering and -Distribution.*—While association between Canadian newspapers for interests connected with the business and social end of newspaper work antedates Confederation, this relationship did not include the function of news-gathering and -distribution—the most fundamental and important part of newspaper work, yet one in which co-operation was most difficult in a country of Canada's dimensions and sparse population. The extensive organization and world-wide connections required for the proper performance of this function, and the fact that the daily press alone was mainly concerned, led to the organization of separate machinery to this end.

The first step in co-operative news-gathering and -distribution in Canada did not come until 1907. Previous to that year the small town dailies and many of the larger papers had to be satisfied with news services from commercial sources, supplemented by occasional and spasmodic telegraph bulletins. Control was, up to that time, vested in the railways—the Canadian Pacific Railway, and the Great North Western Telegraph Company, an affiliate of the Grand Trunk Railway—the services provided were cheap enough but poor, and papers had to take what was served to them.

Opposition to this system first manifested itself in the West, but there was general agreement among publishers throughout the country that it was unsatisfactory. In 1907 the Western Associated Press, organized as a co-operative news-gathering association, came into being at Winnipeg. Arising from small beginnings, it gathered support in the Prairies, although it was in direct competition with the

---

* This section has been summarized from material supplied by J. F. B. Livesay, in 1938, before his retirement as General Manager, the Canadian Press, Toronto, and by other collaborators.

Canadian Pacific Railway. Its members were content for several years to put up with inferior service to that supplied commercially (although this placed them at a disadvantage with their non-member competitors) in defence of the principle at stake. The Western Associated Press later gained the support of the established dailies of Vancouver and Victoria and grew in strength and importance.

The ultimate success of the Western Associated Press was due primarily to the efficiency of the services rendered by Wallace Dafoe, one of the great newspaper correspondents of that day, and the skill of J. F. B. Livesay, as well as to subsequent cheapening of telegraph costs. The Western Associated Press became a model for the later Canadian Press.

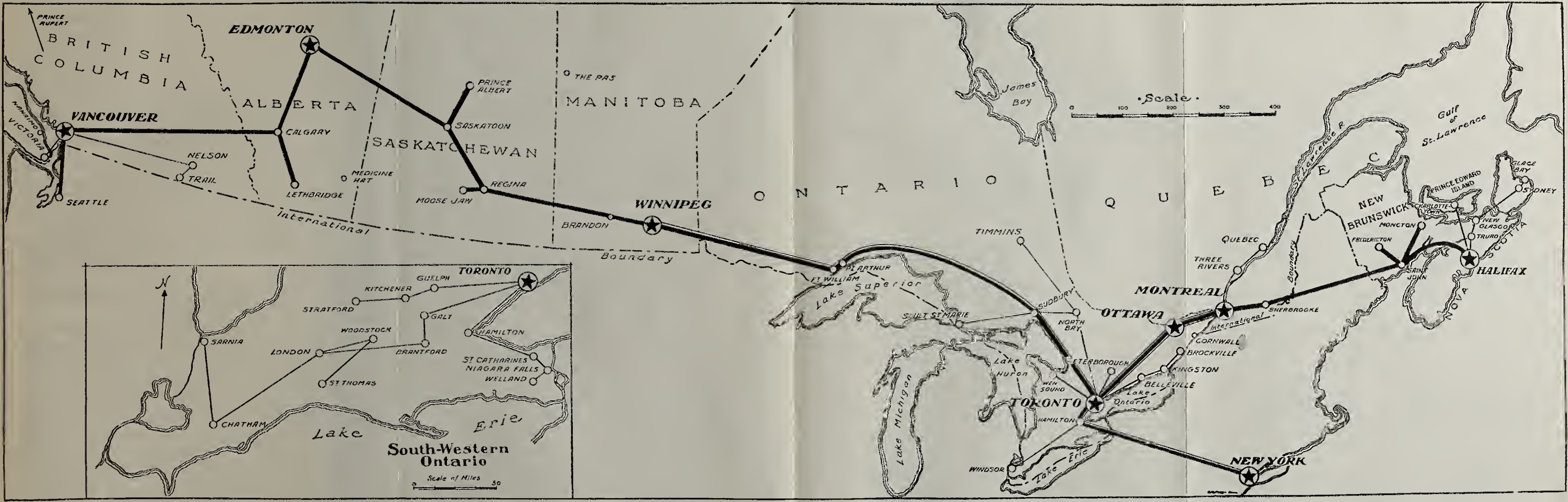
In 1909 the Eastern Press Association was organized in the Maritime Provinces. Ontario and Quebec each established its own organization two years later, so that there were four independent news-gathering bodies covering different sections of the Dominion. The year 1910 marked a turning-point in the fight of the co-operative press associations. In this year the Western Associated Press appealed to the Railway Commission against the exorbitant and inequitable rates charged to its members for use of the Canadian Pacific telegraphic facilities as compared with the rates charged for its own news service. Eastern and Western co-operative associations all combined on the issue, which was eventually won. The principle was recognized that the railways had no business in the news-agency field and the Canadian Pacific Railway voluntarily surrendered to the Canadian papers the Canadian rights to the Associated Press, the great co-operative association of American daily newspaper publishers. In 1911 Canadian Press, Limited, was organized to take over these rights on behalf of Canadian publishers as a whole, and this link was the only bond existing up to that time between the four sectional associations. These were all co-operative with memberships limited to daily newspapers who must be members also of Canadian Press, Limited.

In the immediately ensuing years, E. H. Macklin, President of Western Associated Press, worked tirelessly toward the ideal of a Dominion-wide national co-operative news association. But there stood in the way the apparently insuperable difficulty of covering, by costly leased wires, the geographical 'gaps', lacking population to support daily newspaper publication, necessary to knit these four associations into a single entity. These gaps lie between Saint John and Montreal, Ottawa and Winnipeg, and Calgary and Vancouver. The urge of war, however, supplied the necessary impetus. Realizing that the unification in a news sense of all Canada was essential to the successful prosecution of the War effort, the Borden Government in 1917 made an annual grant to Canadian Press, Limited, of $50,000 for the express purpose of binding these gaps by leased wire. Accordingly, on September 1 of that year the four sectional co-operatives were merged into one national news-gathering and -distributing agency which became known as The Canadian Press, operating under Dominion charter.

In 1924 the grant was withdrawn, but The Canadian Press by that time was able and willing to shoulder the added burden, and felt that by so doing it would free itself from even a suspicion of government control. The annual meeting of 1925 went on record that "never again must the Canadian Press accept a grant or subsidy from any source".

The Canadian Press has built up alliances with The Associated Press, Reuters, and Havas, through which it exchanges news it gathers for that of the rest of the world. Its head office is in Toronto but it maintains its own bureaus in London, New York, Halifax, Montreal, Ottawa, Winnipeg, Edmonton, and Vancouver.

THE CANADIAN PRESS LEASED WIRE SYSTEM — 1938


PRINCE RUPERT
BRITISH COLUMBIA
EDMONTON
ALBERTA
SASKATCHEWAN
MANITOBA
ONTARIO
QUEBEC
VANCOUVER
NANAIMO
VICTORIA
SEATTLE
NELSON
TRAIL
CALGARY
LETHBRIDGE
MEDICINE HAT
PRINCE ALBERT
SASKATOON
REGINA
MOOSE JAW
THE PAS
BRANDON
WINNIPEG
International Boundary
James Bay
Scale
0
100
200
300
400
PT ARTHUR
FT WILLIAM
Lake Superior
SAULT ST MARIE
TIMMINS
SUDBURY
NORTH BAY
Lake Huron
Lake Michigan
WEN SOUND
PETERBOROUGH
TORONTO
HAMILTON
WINDSOR
Lake Erie
Lake Ontario
BELLEVILLE
KINGSTON
BROCKVILLE
CORNWALL
OTTAWA
MONTREAL
THREE RIVERS
QUEBEC
SHERBROOKE
International Boundary
St. Lawrence R.
Gulf of St. Lawrence
NEW BRUNSWICK
FREDERICTON
SAINT JOHN
MONCTON
PRINCE EDWARD ISLAND
CHARLOTTETOWN
NOVA SCOTIA
HALIFAX
TRURO
NEW GLASGOW
GLACE BAY
SYDNEY
NEW YORK
N
TORONTO
GUELPH
KITCHENER
STRATFORD
GALT
HAMILTON
WOODSTOCK
BRANTFORD
LONDON
SARNIA
ST THOMAS
CHATHAM
ST CATHARINES
NIAGARA FALLS
WELLAND
Lake Erie
South-Western Ontario
Scale of Miles
0
30

LEGEND—

- Triple Trunk - ≡
- Double Trunk - =
- Single Trunk - —
- Bureaux - - ★
- Leased Wire Members ○
- Pony Members - ◦

Triple Trunk Mileage	-	1,125
Double Trunk Mileage	-	3,346
Single Trunk Mileage	-	5,484
Special, Sport, and Financial		843
Total Mileage	-	10,798

Membership of the Canadian Press—

Evening Papers	-	-	72
Morning Papers	-	-	19
Total Papers		-	91

Line Engraving, Courtesy The Canadian Press, *Toronto.*

Canadian Pac
with inferior s
disadvantage
stake. The V
dailies of Van

The ultin
efficiency of t
correspondent
cheapening of
the later Cana

In 1909 tl
Ontario and Q
there were fo
the Dominion.
press associat
Railway Com
members for u
rates charged
tions all comb
recognized th
Canadian Pac
Canadian rigl
American dai
organized to t
and this link v
associations.
papers who m

In the im
sociated Press
co-operative n
able difficulty
population to
associations in
Ottawa and V
supplied the n
all Canada wa
Government in
for the expres
September 1
national news
Canadian Pres

In 1924 t
able and willi
free itself fron
1925 went on
subsidy from a

The Cana
and Havas, th
world. Its he
New York, E

With minor exceptions it includes within its membership every Canadian daily newspaper.

Present Procedure in Regard to Membership in The Canadian Press.—The Canadian Press operates under Act of Dominion Parliament, 1923, as a non-profit-making and co-operative association. It has no stock issues and every daily newspaper desiring its services must secure a membership. This membership carries with it one vote at annual or special meetings and thus the wealthiest newspaper has no more and no less voting power than that of the smallest daily newspaper in a pioneer community. At the annual meeting 21 directors, representative of all sections of the country, are elected and these in turn elect for the year an honorary president, a president, and first and second vice-presidents. Each member is entitled to the full news services of the association, limited only by his ability to pay. In return he contracts to give the association, exclusively, the local and regional news he collects. He also contracts to pay the assessments levied on a co-operative basis, based on ratio of the population of his city to the total population of all cities in which memberships exist. Circulation is not considered and where two or more newspapers are published in one city, their cost is equalized, though some concessions are made to French member newspapers because of their cost of translation.

Theoretically, the membership is open to every daily newspaper established in its field and able to pay its assessments. The application for a new membership must secure two-thirds vote of the board of directors and must also pay an entrance fee equivalent to thrice the annual cost levied against his city on the population basis.

Influences that have Affected the Development of the Modern Press, and Present-Day Tendencies.

Mechanical Progress and Its Effects.—Until the middle of the 1880's the "Industrial Revolution" in its chief aspects had not affected the type-setting process—the fundamental operation of the printing and publishing industry. Type continued to be set by hand as in the days of Gutenberg and Caxton. In 1885, however, Otto Mergenthaler took out a United States patent for a slug-casting machine, which was the forerunner of the modern linotype, and enabled one man to set up the quantity of type formerly set up by five or six, thus 'speeding up' the process of 'composition'—a matter of great importance to a daily newspaper which aims to serve up news while it is 'hot'. Canadian dailies began to use this machine about 1890, and Canadian weeklies and magazines have used it and its rival, the monotype machine which sets up single type, in the present century.

The development of the modern printing press has been less sudden and spectacular, though quite as epoch-making. Hand-presses were used in the production of the early Canadian newspapers, and the hand-press on which the first newspaper in Upper Canada was printed about 1792 was for a long time on exhibition in the windows of the Toronto *Telegram* for comparison with the press of that paper; this early hand-press was capable of running about 100 copies per hour—a fact which in itself militated against large circulation.

The first steam-power press, capable of producing about 1,100 copies per hour, appeared about 1811, and in England the London *Times* was first printed on such machines in 1814; these were replaced in 1827 by machines printing 4,000 copies per hour. By 1856, further improvements made it possible to print 8,000 copies per hour on the Hoe machines then in use. Since then, further improvements have been made, and we are told in the *Encyclopædia Britannica* that "present-day newspaper presses are capable of printing simultaneously from as many as 15 reels and of producing 300,000 copies per hour". Canadian newspapers have taken full advantage of the improvement and cheapening of both the type-setting process and the printing process to increase both the size and the circulation of their newspapers, the aggregate number of copies of Canadian daily newspapers alone reaching in 1936, 2,276,000 per day, or approximately one per household for the total population.

Canadian weeklies, too, have an enormous aggregate circulation. In some cases, they are weekly editions of daily newspapers, and these have very large individual circulations. The great majority of Canadian weeklies, however, supply in the main the local news of the communities which they respectively serve, together with digests of world news which are perhaps more valuable because of their condensation. In spite of the growing influence of the dailies, these local weeklies still exercise a great influence on the affairs of their respective communities. Other weeklies serve the special needs of various businesses and professions, or are the organs of churches and fraternal organizations, and still others are printed in languages other than the official languages of Canada, and serve the needs of those who speak these languages by keeping them in touch with the progress of affairs in their original homes. Altogether, the weeklies printed in Canada had an aggregate circulation of 3,916,000 copies per week in 1937 (see Table **5**, p. 771).

The mechanization of the type-setting and the printing processes described above, great as was its stimulus to the output of printed matter, had also its attendant disadvantages. The high cost of type-setting machines and the enormous cost of modern printing presses converted the publication of newspapers from an artistic and intellectual into a business undertaking, and was largely responsible for a tendency for the business office to dominate the editorial and news desks. Again, since advertising rates are very generally based upon circulation, there was a struggle for sales, which resulted in the elimination of many deserving newspapers such as the Montreal *Witness*. Further, because of greater rapidity of communication, the city dailies have tended more and more to cut in upon both the circulation and influence of the older weeklies, which in many cases were edited by men of good education and independent views. These were leaders of public opinion in their communities and were in many cases chosen to represent those communities in municipal councils, in the Legislatures, and in Parliament. In a word, the evolution of Canadian newspapers and magazines in the past half-century has exemplified both the advantages and the disadvantages of modern large-scale production.

The Press as Affected by Its Supply of Paper.—Every newspaper or magazine is ultimately dependent for its publication upon the maintenance of its supply of paper, which may be regarded as the chief raw material of the printing and publishing industry. The development of the Canadian press has therefore been to a great extent conditioned by the evolution of the manufacture of paper and the prices at which paper can be obtained.

The first periodical publications to be printed in Canada were doubtless printed on imported paper, which must in those days have been relatively expensive, so that the first issue of the Halifax *Gazette* was printed on a half sheet of foolscap. The problem of the supply of paper was a serious one for the early printers, and it is highly significant that probably the first paper-mill in what is now Canada was set up at St. Andrews in the county of Argenteuil, by James Brown, then printer of the *Canadian Gazette* in Montreal, in 1803.* Ontario's first paper-mill was set up at

---

* Fauteux says 1806.

Crook's Hollow (now Greensville) in 1813, and a Nova Scotian paper-mill was established at Bedford Basin near Halifax in 1819. All these paper-mills and their successors used rags as raw material almost exclusively; it was not until 1866 that Alexander Buntin installed in his paper-mill at Valleyfield, Quebec, the first wood grinder in America, while in the same year Angus, Logan and Company started the first mill making chemical fibre from wood. These mills were the pioneers in what is now one of the greatest of Canadian industries, which assures to our newspapers an abundant supply of their chief raw material.

In this article, however, we are concerned not with the paper industry as such, but with its influence upon the development of the Canadian press. This may best be measured by the trend of prices. Good statistics of prices, unfortunately, are available only from 1890, when the quoted price of newsprint paper was $3·70 per 100 lb. delivered. Thereafter there was a downward trend, and the corresponding quotation in 1905 and 1906 was only $2 and in 1907 and 1908 only $1·95. This decline of nearly one-half in the price of newsprint, at a time when general prices were advancing, was presumably due to improved and less expensive methods of manufacture. At any rate, it had a great influence upon the development and expansion of Canadian newspapers. Like other prices, that of newsprint shot upward during the War to a maximum of $5·678 per 100 lb. for carload lots f.o.b. Canadian mills in 1921. Nineteen twenty-two recorded an abrupt fall to approximately $3·60, and thereafter prices declined steadily, especially during the depression, to a minimum of $1·643 in 1934, since when there has been an increase, the quotation for September, 1938, being $2·163. In this latest period there have been various increases in the prices of Canadian newspapers but these increases appear to have had little effect upon the circulation.

The Influence of the Rising Standard of Literacy.—The effect of the more universal education of the population of Canada upon the growth of the press is difficult to appraise. The increase in the total population from 1891 to 1931 was about 115 p.c., but the increase in population over five years of age who could read and write was 170 p.c. Again, the total population increased by 180 p.c. from 1871 to 1931, but the population attending school increased by 217 p.c. in the same period.

From these figures it is evident that the increase in the number of people of an educational standard who patronize the press has been proportionately greater than the actual increase of population. Even so, the increase has not been great enough to be a very important factor in the growth of the press. One must conclude that other factors, such as improved news services, wider appeal through special features (financial, sports, social, etc., pages), and better means of distribution with the general improvement in transportation facilities, have had much more influence upon the growth of the press than the practical elimination of illiteracy among the population of Canada.

It is probable that the people of the Dominion to-day are far more 'news-conscious' and are to a greater extent habitual readers of periodicals than were their forefathers at the time of Confederation, but the press itself has been one of the leading influences in developing this more universal patronage of its services.

Present-Day Tendencies in the Newspaper Field.—The press is, from its nature, in the van of all progressive movements. It must keep pace with the times or quickly suffer the consequences, and the 'tempo' of change is now increasing so rapidly that, especially among the smaller papers and journals, competition is very keen.

On p. 745 the influence of the Toronto *World* in changing the standards of morning journalism has been touched on. In recent times the publication of pictures to visualize a news story has been developed to a high degree of efficiency and newspaper photography has become a highly specialized art. This influence has introduced an intimate touch formerly lacking to newspaper readers. Chamberlain, Mussolini, or Hitler are so well known to the man-in-the-street to-day that he would recognize each of them in person at once.

Among the influences that to-day operate to increase the costs of publication are the recent introduction of photographic illustrations transmitted instantaneously from all parts of the world by wire, and the higher standards that have been forced on the local paper by the competition which modern highway transport has brought about. Expensively edited large city dailies can now be brought into the territory of the local paper, and though they may not cut into the circulation of the latter to any great extent, since purchasers of outside papers are not all disposed to cancel the local paper, yet they do tend to enforce a higher editorial standard on the local paper. Still another factor of expense competition makes it impossible to ignore is the success that has attended the colour-printing process as applied to newsprint. The advances made in this field were exemplified on the occasion of the Royal Tour of Canada in the excellent special editions put out by certain Toronto and Winnipeg papers.

Modern transportation agencies and the Post Office Department provide distribution machinery by which the large dailies reach well beyond the confines of their own cities and suburbs. The Montreal *Gazette* and the Toronto *Globe and Mail,* for instance, circulate within a radius of 150 to 300 miles from the centres where they are published and printing arrangements either for the regular or special editions are such that it is possible to deliver copies by carrier within this territory between 7 and 9 o'clock on the morning of the date of issue.

Aerial transportation is another factor which is rapidly growing in importance and which will have to be reckoned with in the near future. At present only experimental deliveries of papers by air-line have been carried out by leading dailies from Montreal and Toronto to Chicago, Winnipeg, and points even farther west, where their sheets have been put on sale during the afternoon of the day of issue. The cost of such transport is at present heavy and will be a factor in retarding the organization of regular scheduled deliveries, but, as history has frequently shown, from new movements such as this vast changes are apt to result. The official opening of the Trans-Canada Air Lines on Mar. 1, 1939, will expedite this movement.

Again, the influence of radio on the press has been immense and is likely to change radically the methods and ways of serving up certain classes of news items. It seems safe to assume that eventually the fields to which each vehicle is best suited will become more definitely defined; the radio can never supplant the press, but it can and will tend to supplement it in even wider measure and greater degree that it does to-day. It is mainly in regard to advertising that the competition of the radio is now being felt. Naturally, when large advertisers lay out their annual appropriations and allot a large share to radio broadcasting, it means so much less for newspapers and magazines, but the case is not so one-sided as it at first appears, for the appropriations for advertising have undoubtedly been greatly increased on account of the radio, and effective appeal through the eye as well as, and often rather than, through the ear is part of the psychology of advertising. Radio as an advertising medium has appealed to producers of nationally and internationally advertised products for the most part, and has not yet influenced other fields materially. Its effect, up to the present, has been to stimulate the quality of press layouts and colour processes rather than to cut in on newspaper revenues, although some reduction in revenue appears to be attributable to this form of competition.

What new doors will be opened up by television it is, of course, impossible to say. The results of these influences have been to increase the costs of putting out a newspaper. As is generally known, the advertiser carries the paper—not the subscriber—but publishers have obliged readers to shoulder part of the added burden by general increases in subscription rates. It may now be taken for granted that the 'penny' paper has disappeared for good.

Another important result of rising standards and extra services has been the development of a marked tendency to consolidation among papers. It is no longer possible to start up a new paper without ample financial backing, and the risks of failure are multiplied. This accounts for the trend already mentioned towa ds amalgamation in the case of large dailies. There is a similar trend towards single papers in many small cities and towns which formerly boasted two or more rival sheets; this type of consolidation, brought about on economic grounds, makes the papers less inclined to take political sides in their editorial columns and accounts, in some measure, for the increase in the number of 'independent' papers in recent times.

In this connection newspaper chains, though not developed in Canada on a scale comparable with that to be found in the United States, deserve mention. Certain influential dailies are by this means brought together under a common management for the savings which can be effected in the purchase of certain services, for which competition is keen and the cost high. For instance, in the case of syndicated material, whether in the form of serials, illustrations or news 'stories' which 'break' suddenly and have a high immediate value, a chain of several papers is advantageously situated to bargain for the rights of publication as against even the largest daily.

In Canada, at present, only two interprovincial chains operate. These are the Southam and the Sifton groups. The former takes in the Ottawa *Citizen*, the Hamilton *Spectator*, the Winnipeg *Tribune*, the Calgary *Herald*, the Edmonton *Journal* and the Vancouver *Province;* the latter embraces the Winnipeg *Free Press* and its associate papers, the Regina *Leader-Post*, and the Saskatoon *Star-Phœnix*. The fact that these papers are under a common management does not mean that their editorial policies are directed along similar lines or that their political complexions are necessarily the same. On the contrary, the local managers are usually given a free hand to shape the policies of the papers according to the conditions in their territories and both 'independent' and 'party' papers may be found in the same group.

The advantages which accrue to the large chain are (though to a lesser extent of course) open to the small chain, and as a result of the keenness of competition there is a definite trend towards the linking of relationships between papers intra-provincially in order to profit from the stronger bargaining position thereby created and a general lowering of costs. Among such provincial-local links may be mentioned those of the Montreal *Gazette* with the Sherbrooke *Record* in Quebec; the Kingston *Whig-Standard* with the Peterborough *Examiner*, and the St. Thomas *Times Journal* with the Stratford *Beacon-Herald*, the Sarnia *Canadian Observer* with the Woodstock *Sentinel-Review*, the Galt *Reporter*, and the Welland-Port Colborne *Tribune* in Ontario; etc.

Present-Day Tendencies in the Magazine Field.—In this field, Canada has developed a number of outstanding national journals. In spite of the comparatively high cost of production here as compared with the United States, and the magnetic attraction which that country, with its large population, has had for rising talent, several magazines built up influential positions and wide circulations. Nevertheless, outside competition is keenly felt by Canadian publishers and it is held that the matter of quality of product no longer enters greatly into the picture. Modern magazine circulation is the result of salesmanship pressure even more than editorial quality and the aggressive methods, aided by the financial strength, of certain United States magazines are real difficulties to the Canadian magazine publisher.*

Other modern competitive influences which Canadian magazines must meet come from the larger week-end metropolitan newspapers, which, in modern times, feature stories and general magazine material as well as news and, in more recent years, from radio advertising.

Geographical conditions militate to some extent against the growth of a truly national newspaper press in Canada and for this reason the Canadian magazines are much more important than their mere economic value implies. Their distribution is, in most cases, Dominion-wide and their national unifying influence as well as the encouragement they give to the growth and expression of national feeling and sentiment are assets which cannot be measured. The leading magazines are published in the larger cities; among these are; *Maclean's Magazine*, *Canadian Magazine*, and *National Home Monthly* which have become firmly established in the general field of English magazines, while *Le Samedi* is the leader of a group of French-Canadian magazines published and widely distributed in the province of Quebec. Magazines published for women began to break ground after 1900 and have since made great headway. *Chatelaine* and *Canadian Home Journal* have won recognition in the women's field.

Within the past thirty years competition for advertising between magazines and newspapers has become keen. Previously, what magazines there were struggled along with relatively little advertising and most of that was presented in the accepted newspaper style of the day. To-day the magazine has opened up new fields and has developed a technique of its own. The superior paper stock on which it is usually printed and the extensive use of colour printing have assisted the movement and commanded the services of the best artists, engravers, and colour specialists. National advertising, the application of psychological principles, and the direction of appeal to influential consumer groups rather than purchasers are factors that have entered into the development of the modern art. The reader who takes up a magazine usually has time and is in the mood to peruse leisurely and give thought to its attractive display pages with the result that the publisher and the advertiser co-operate to make the most of the opportunity and it is natural, therefore, that some of the most attractive and appealing forms of advertising are promoted through the medium of the magazine.

The art of good advertising, as in the case of magazines generally, is exemplified in the trade journal and has contributed much to its success. This is the avenue through which commercial and manufacturing houses, that can afford elaborate advertising plans, choose to appeal to their prospective clients, and the specialization of good journalism with advertising reaches a high point in this type of publication.

In the fields of agricultural and business periodicals and religious and educational publications, Canada has supported many outstanding successes.

---

* The *Canadian Magazine*, which has been among the oldest and best known national periodicals in the Dominion, announced in its April, 1939, issue that it was forced to cease publication. The reasons given were that the publishers could not justify further commitments to carry on in the face of ever-increasing taxation, uncertainty, and what was claimed to be unfair competition of radio advertising programs.

In Table 3, pp. 765 to 770, will be found data regarding the leading magazines and special papers of Canada. According to the classification, adopted from *Canadian Advertising*, there were, towards the close of 1938, a total of 70 general magazines in active circulation in Canada of which 11 were published in the French language. Active Canadian financial papers, at the same period, numbered 21, of which 2 were in the French language; farm papers 37 (4 French); and no less than 216 journals and papers classified as "business" periodicals. The magazines and papers represented in the table are the principal ones in each class on the basis of approved circulation.

Conclusion.

From the comparison of conditions outlined in the early part of this article with the influences and tendencies at present operative some idea of the immense service which the newspaper has rendered in Canada and the great cost in human effort (heroic at times) which this has entailed is obtained.

It will be seen that modern days have brought many changes. The highly complex and quickly responsive organization now necessary for news-gathering and the costly and intricate machinery required to turn out the large present-day dailies and weeklies have raised newspaper publication into a branch of 'big business', on which a large and increasing army of employees relies for subsistence and in which large capital investments are at stake (see pp. 398-399 for statistics of printing and publishing). The successful paper must now stand on its own feet financially and otherwise, and, although opinion as expressed in the editorials often has party leanings, the news of the better-class modern newspaper is usually unbiased and the strength of the 'independent' press has shown consistent growth.

Thus, in spite of the present tendency to concentration and co-operative expression for certain aims which have been described at pp. 745 to 751, the press as an entity is still an aggregate of separate units, each working out its own destiny in its own way. The great dailies, which originate in the larger cities from coast to coast, are the more imposing, but the smallest weekly is just as much a unit in the 'democracy of the press'.

The co-operative associations already described are unifying influences only so far as economy of operation is concerned and not as regards editorial policy or internal management. In regard to news-gathering, besides working through the Canadian Press, some of the larger papers have also their own foreign correspondents. By means of such news-collecting agencies the press is in touch on the one hand with events occurring in the four corners of the earth, and on the other with the local weeklies and semi-weeklies of the smaller towns to which a large part of outside news is syndicated.

Canada, in spite of the scattered distribution of her population, has, in her press, machinery for the distribution of up-to-date information among her people which is unsurpassed in other countries of comparable importance in population, wealth, and markets.

It is unnecessary to emphasize further the important place which the dissemination of news has played in the growth and development of Canada. This is woven into the fabric of the Dominion's history; it has depended in turn on the progress of all forms of transportation and communication—steam, electricity, the telegraph, the ocean cable, the telephone, and, since the War, the aeroplane and the radio. The scope of the modern paper has widened considerably with these increased facilities. All possible subjects from literature, art, nature study, home-making, and health, to amusement columns which while away a tedious hour for both young and old, as well as personal-problem columns, are now featured. It is a truism—almost a platitude—that the success of modern constitutional government rests on an aggressive and soundly informed public opinion, but it is not so commonly recognized that without a free press—high-principled and vigorous in the best interests of the State—democracy, in many ways the most difficult form of government, would be greatly handicapped.

Section 2.—Statistics of the Press.

The Dominion Bureau of Statistics does not collect statistics regarding the circulation of newspapers and periodicals in Canada and the following tables have been compiled from data taken from *Canadian Advertising* in so far as individual papers and periodicals are concerned, *viz.*, with regard to the statistics of Tables **1**, **2** and **3**, and *McKim's Directory of Canadian Publications*, with regard to the historical and summary tables, *viz.*, Tables **4** to **7**. The former publication, being issued quarterly, has an advantage in regard to the individual circulations inasmuch as statistics can be brought up to within three months from the time this section of the Year Book is printed, but the long series of *McKim's* annuals provide material for historical trends on a comparable basis.

Tables **1**, **2**, and **3** classify the statistics of the principal dailies, weeklies, and magazines in Canada. The publications enumerated in Table **4** include a number for which no estimate of circulation is given. Such publications are therefore omitted from the compilation of circulations in Tables **5** and **6**. This accounts for the difference in the number of daily, semi-weekly, and weekly publications shown in Tables **4** and **5**. Comparison of the figures of Table **6** showing publications in cities of 20,000 population or over, with those for the same year of Table **5**, showing publications for the whole of Canada, indicates that the daily newspapers are confined almost entirely to these larger urban communities, but that, in the field of weekly publications, while the greater part of the circulation is accounted for by the publications of these cities, by far the greatest number of weeklies are issued in smaller communities. The weekly seems to be the standard medium for local news in small towns and villages.

The French weekly press in particular has always been a strong influence in Quebec. The urban section centres in Montreal and a few of the larger papers like *La Patrie Le Petit Journal* (see Table **1**), and *Le Samedi* (classed as a magazine in Table 3) are well established. The rural weekly press in this province stands close comparison with that of the rest of the country. Its evolution has been parallel to that of the English rural press, with the difference that its field has been more limited. Most of the French rural weeklies, if small as measured by circulation, are old institutions, many of them having passed the half-century mark. As in the case of the English weekly press, the development of local job printing, especially commercial advertising, has been a strong influence in the survival of many of the smaller rural weeklies.

1.—Daily Newspapers of Canada: Places where Published, Circulations, Years Established, and Political Affiliations, by Provinces.

Note.—Information taken from *Canadian Advertising*, April-June, 1939, except where otherwise indicated.

Province and Paper.	Morning or Evening.	Where Published.	Circulation.[1]	Year Established.	Political Affiliation.
Prince Edward Island—					
Guardian	M.	Charlottetown	5,882	1891	Ind.-Cons.
Patriot	[5]	Charlottetown	4,101	1857	Lib
Nova Scotia—					
Herald and Mail	M. and E.	Halifax	60,054	[2]	Ind.-Cons.
Chronicle and Star	M. and E.	Halifax	30,816	[3]	Ind.
Post-Record	E.	Sydney	13,146	[4]	[5]
Gazette	E.	Glace Bay	7,885	1900	Ind.
Evening News	E.	New Glasgow	3,026	1910	Cons.
Truro Daily News	E.	Truro	1,373	1891	Ind.
News	E.	Amherst	1,329	1893	Ind.-Cons.
New Brunswick—					
Telegraph-Journal and Times-Globe	M. and E.	Saint John	34,006	[6]	Ind.
Gleaner	E.	Fredericton	8,438	1880	Ind.
Transcript	E.	Moncton	6,300	1882	Ind.-Lib.
Times	M.	Moncton	6,071[7]	1868	Lib.-Cons.
Mail	E.	Fredericton	2,250	1910	Ind.
Quebec—					
English—					
Star	E.	Montreal	119,603	1869	Ind
Gazette	M.	Montreal	31,984	1778	Ind.-Cons.
Herald	E.	Montreal	21,183[8]	1811	Ind.
Daily Record	E.	Sherbrooke	8,489	1897	Ind.
Chronicle-Telegraph	E.	Quebec	4,897	1764	Ind.
French—					
La Presse	E.	Montreal	152,070[8]	1884	Ind.
Le Soleil-L'Evènement-Journal	M. and E.	Quebec	68,526	[9]	[5]
L'Action Catholique	E.	Quebec	56,303	1907	Ind.
Le Devoir	E.	Montreal	13,662	1910	Ind.
Le Canada	M.	Montreal	13,551	1903	Lib.
La Patrie	E.	Montreal	12,832[8]	1878	Ind.
L'Illustration Nouvelle	M.	Montreal	12,184	1929[7]	[5]
Le Nouvelliste	E.	Three Rivers	11,002	1920	Ind.
La Tribune	E.	Sherbrooke	8,377	1910	[5]
Other—					
Jewish Daily Eagle (Der Kenader Adler)	M.	Montreal	19,341	1907	Ind.
Ontario—					
English—					
Star	E.	Toronto	227,145	1892	Ind.
Globe and Mail	M.	Toronto	154,664	[10]	Ind.
Telegram	E.	Toronto	138,604	1876	Ind.
Spectator	E.	Hamilton	55,342	1846	Ind.
Free Press	M. and E.	London	49,651	1849	Ind.-Cons.
Daily Star	E.	Windsor	43,510	1918	Ind.
Journal	M. and E.	Ottawa	32,943	1885	Ind.-Cons.
Citizen	M. and E.	Ottawa	32,329	1844	Ind.
Record	E.	Kitchener	12,485	1878	Ind.-Lib.
Daily Clarion	E.	Toronto	12,250[8]	1936	[5]
Expositor	E.	Brantford	11,897	1852	Ind.
Standard	E.	St. Catharines	11,384	1891	Ind.
Whig-Standard	E.	Kingston	10,822	[11]	Ind.
Examiner	E.	Peterborough	8,595	1884	Ind.
Times-Journal	E.	St. Thomas	8,360	1882	Ind.
Varsity Daily[7]	[5]	Toronto	8,250	1880	[5]
Daily Sun-Times	E.	Owen Sound	7,973	1854	Ind.
News	E.	Chatham	7,627	1890	Ind.
Mercury	E.	Guelph	7,404	1854	Ind.
Beacon-Herald	E.	Stratford	7,388	1887	Ind.
Canadian Observer	E.	Sarnia	6,913	1917	Ind.
Star	[5]	Sault Ste. Marie	6,789	1912	Ind.
Times-Journal	E.	Fort William	6,652	1893	Ind.
Evening Review	E.	Niagara Falls	6,588	1879	Ind.
Sentinel-Review	E.	Woodstock	6,326	1878	Ind.
Reporter	E.	Galt	5,982	1896	Ind.
Ontario Intelligencer	E.	Belleville	5,981	1870	Ind.
News-Chronicle	E.	Port Arthur	5,421	1900	Ind.

For footnotes, see end of table, p. 760.

1.—Daily Newspapers of Canada: Places where Published, Circulations, Years Established, and Political Affiliations, by Provinces—concluded.

Province and Paper.	Morning or Evening.	Where Published.	Circulation.[1]	Year Established.	Political Affiliation.
Ontario—concluded.					
English—concluded.					
Welland-Port Colborne Evening Tribune	E.	Welland	5,028	1863	[5]
Daily Press	E.	Timmins	5,012	1933[7]	[5]
Recorder and Times	E.	Brockville	4,802	1820	Ind.-Lib.
Daily Times	E.	Oshawa	2,582	1871	Ind.
Post	E.	Lindsay	2,059	1895	Ind.
Lindsay Daily Warder[7]	[5]	Lindsay	2,000	1908	[5]
Guide	E.	Port Hope	1,250[8]	1876	Ind.
French—					
Le Droit	E.	Ottawa	16,795	1913	Ind.
Other—					
Hebrew Journal (Yiddish)	M.	Toronto	21,250[8]	1912	Ind.
Shing Wah Daily News (Chinese)	E.	Toronto	6,913	1916	Chinese Nationalist
Vapaus (Liberty) (Finnish)	[5]	Sudbury	5,820	1917	Labour
Manitoba—					
English—					
Free Press	M. and E.	Winnipeg	61,907	1874	Ind.
Evening Tribune	E.	Winnipeg	35,642	1890	Ind.
Sun	E.	Brandon	3,821	1882	Con.
Northern Mail	E.	The Pas	2,443	1929	Ind.
Daily Graphic	E.	Portage la Prairie	1,250	1895	Ind.
Other—					
People's Gazette (Ukrainian-Narodnaja Gazeta)	[5]	Winnipeg	14,878	1935	Labour
Saskatchewan—					
Leader-Post	E.	Regina	27,181	1883	Ind.-Lib.
Star-Phoenix	E.	Saskatoon	18,090[8]	1902	[5]
Daily Star	E.	Regina	10,864	1928	Ind.
Times-Herald	E.	Moose Jaw	4,362	1889	Lib.
Herald	E.	Prince Albert	3,096	1911	Ind.
Alberta—					
Journal	E.	Edmonton	32,864	1903	Ind.
Herald	E.	Calgary	26,872	1880	Ind.
Bulletin	E.	Edmonton	14,141	1880	Ind.
Albertan	M.	Calgary	13,352[8]	1902	[5]
Herald	E.	Lethbridge	6,760	1907	Ind.-Lib.
News	E.	Medicine Hat	1,530	1910	Lib.
British Columbia—					
English—					
Daily Province	E.	Vancouver	83,879	1898	Ind.
Sun	E.	Vancouver	68,016	1886	Ind.-Lib.
News-Herald	M.	Vancouver	19,617	1933	Ind.
Colonist	M.	Victoria	11,956[8]	1858	Cons.
Times	E.	Victoria	11,303[8]	1881	Lib.
News	M.	Nelson	6,017	1902	Ind.
British Columbian	E.	New Westminster	5,687	1886	Cons.
Free Press	E.	Nanaimo	4,000	1874	[5]
Times	E.	Trail	3,090	1895	Ind.
Daily Herald	M.	Nanaimo	2,500[7]	1900	[5]
Daily News	E.	Prince Rupert	1,438	1910	Ind.
Empire	E.	Prince Rupert	1,000[7]	1908	Cons.
Other—					
Continental Daily News (Japanese)	E.	Vancouver	4,989	1907	Ind.
Chinese Times	M.	Vancouver	3,844	1907	Ind.
Republic (Chinese)	[5]	Victoria	3,000[7]	1912	[5]
Daily People (Japanese)	E.	Vancouver	2,875	1920	Labour

---

[1] Circulations at latest date available; in most cases they are as reported for Sept. 30, 1938. [2] Herald 1873; Mail 1878. [3] Chronicle 1844; Star 1873. [4] Record 1898; Post 1900; amalgamated 1933. [5] Not reported. [6] Telegraph Journal 1868; Times Globe 1904. [7] From *McKim's Directory of Publications, 1938*. [8] Monday to Friday circulation: for Saturday or Sunday circulations see Table 2. [9] L'Evènement 1867; Le Soleil 1882; Journal 1929; amalgamated 1936. [10] The Globe 1844; Mail and Empire 1872; amalgamated 1936. [11] British Whig 1834; Daily Standard 1810; amalgamated 1926.

2.—Principal[1] Weekly and Semi-Weekly Newspapers of Canada: Places Where Published, Circulations, Years Established, and Political Affiliations, by Provinces.

NOTE.—Information taken from *Canadian Advertising*, April-June, 1939, except where otherwise indicated.

Province and Paper.	Where Published.	Circulation.	Year Established.	Political Affiliation.
CITY AND COMMUNITY WEEKLIES.				
New Brunswick—				
Gazette (tri.)	Chatham	1,393	1910	Ind.-Lib.
Quebec—				
MONTREAL—				
English—				
Standard		75,365	1905	Ind.
Herald		15,842	1811	Ind.
Canadian Jewish Chronicle		10,974	1897	[2]
Canadian Jewish Review		8,217	1921 [3]	[2]
Beacon		5,000	1929	Ind.
Free Lance (Afro. Can.)		5,000 [3]	1933	Ind.
French—				
La Presse (Sat.)		178,983	1884	Ind.
Le Petit Journal		83,737	1926 [3]	Ind.
L'Unité		33,000	1935	Ind.
La Patrie		29,091 (Sat.) 99,364 (Sun.)	1878	Ind.
L'Autorité		13,500	1913	Ind.
Le Jour		10,000	1937 [3]	[2]
Le Sport		10,000	[2]	[2]
OTHER THAN MONTREAL—				
English—				
Monitor	Notre Dame de Grace	17,600	1924	[2]
Guardian	Verdun	16,500	1929	Ind.
Messenger (bil.)	Verdun	15,000	1918	Ind.
Examiner	Westmount	7,200	1931	Ind.
French—				
Franc-Parleur	Quebec	4,000 [3]	1915 [3]	[2]
Ontario—				
TORONTO—				
Star Weekly [3]		324,176	[2]	Ind.
E. Toronto Weekly and Chronicle		20,000	1918	Ind.
Beaches Smiles		15,800	1920	Ind.
St. Clair Weekly Times		15,400	[2]	[2]
Danforth Tribune		15,000	1938	Ind.
Nor'Wester		12,500	1927	Ind.
W. Toronto Weekly		12,500	1921	[2]
Danforth Spotlight		12,000	1924	Ind.
The Herald		12,000	1924	[2]
Bloor Watchman		11,500	1926	Ind.
Clarion		10,500 [3]	1936 [3]	[2]
Yonge-Bloor Standard		10,000	1938	Ind.
The Promoter		10,000	1939	[2]
News Weekly		10,000	1930	[2]
Beaches Tribune		8,500	1938	Ind.
Eglinton Courier		8,000	1937	Ind.
Pioneer News		8,000	1918	Ind.
St. Clair-Yonge Gazette		8,000	1938	Ind.
Kingston Rd. and Main St. Herald		7,000	1927 [3]	Ind.
Riverdale Tribune		5,500	1938	Ind.
Lake Shore Free Press		5,200	[2]	[2]
East York Weekly News		4,500	1929	Ind.
Uptown Messenger		2,750	1926	Ind.
Eastender		[2]	[2]	[2]
Riverdale Gazette		[2]	[2]	[2]
OTHER THAN TORONTO—				
English—				
Review	Hamilton	28,500	1902	Ind.
Echo	London	20,000	1879	Ind.
Twin City Press	Fort William and Port Arthur	12,850	1934	Ind.
Courier	Oshawa	10,500	1933	Ind.
The Sudbury Star (tri)	Sudbury	8,164	1909	Ind.
Free Press	Oshawa	7,000	1935	Ind.
The North Bay Nugget (tri)	North Bay	7,000	1909	Ind.
The Standard Freeholder (tri)	Cornwall	6,619	[4]	Ind.
The Herald	Sarnia	6,000	1935	Ind.
Twin City Review	Waterloo	4,000	1938	Ind.
Post	Lindsay	3,940	1895	Ind.
The Citizen	Belleville	3,750	1937	Ind.

---

[1] Based on circulation. [2] Not reported. [3] From *McKim's Directory of Canadian Publications, 1938.* [4] Freeholder, 1846: Standard, 1886.

2.—Principal[1] Weekly and Semi-Weekly Newspapers of Canada: Places Where Published, Circulations, Years Established, and Political Affiliations, by Provinces— continued.

Province and Paper.	Where Published.	Circulation.	Year Established.	Political Affiliation.
CITY AND COMMUNITY WEEKLIES—concluded.				
Ontario—concluded.				
OTHER THAN TORONTO—concluded.				
English—concluded.				
The Mirror	Stratford	3,500	1923	[2]
Advertiser	Galt	[2]	[2]	[2]
French—				
Le Droit	Ottawa	17,702[3]	1913	Ind.
Manitoba—				
WINNIPEG—				
Winnipeg Record		41,250	1934	Ind.
West Jewish News		15,340	[2]	[2]
Southender		10,000	1926	Ind.
Jewish Post		9,800	1924	Ind.
OTHER THAN WINNIPEG—				
Herald	Elmwood	4,750	1916	Ind.
Optimist	Brandon	3,500	1933	Ind.
Norwood Press	St. Boniface	2,600	1905	Ind.
Saskatchewan—				
Star-Phoenix	Saskatoon	21,651	1902	[2]
National Advertiser	Saskatoon	10,500	1937	Ind.
Shopper's Guide	Saskatoon	10,500	1924	Ind.
Western Spotlight	Moose Jaw	5,800	1923	Ind.
Alberta—				
Chinook Shopper	Calgary	22,000	1938	[2]
Albertan	Calgary	17,412	1902	[2]
S. Edmonton Weekly News		4,500	1923	[2]
People's Weekly	Edmonton	4,300	1919	Ind.
Nor-East Ad-Viser	Edmonton	2,500	1931	[2]
Weekly News	Medicine Hat	77[illegible]	1885	Ind.
Weekly Herald	Lethbridge	761	1905[3]	[2]
British Columbia—				
VANCOUVER—				
Mt. Pleasant-S. Vancouver Bulletin		9,200	1932[3]	[2]
West End Gazette		7,300	1932[3]	Ind.
Mt. Pleasant News		7,000	1918	Ind.
Highland Echo		5,000	1918	Ind.
Western News Advertiser		5,000	1931	[2]
Kitsilano Times		4,150	1912	Ind.
Hastings News		4,000	[2]	Ind.
West Vancouver News		2,000	1926	[2]
OTHER THAN VANCOUVER—				
Colonist	Victoria	16,569	1858	Con.
Times	Victoria	13,591	1881	Lib.
Carleton News	Burnaby	4,000	1936[3]	[2]
Review	North Vancouver	3,850	1926[3]	Lib.
The Spokesman	Victoria	1,000	1929	[2]
OTHER WEEKLIES AND SEMI-WEEKLIES.				
Prince Edward Island—				
Journal	Summerside	3,500	1865[3]	Con.
Pioneer	Summerside	3,485	1874[3]	Lib.
Nova Scotia (over 2,000 circulation)—				
The Casket	Antigonish	6,274	1852[3]	Ind.
Bulletin	Bridgewater	3,923	1891[3]	Ind.
Free Lance	New Glasgow	3,676	1894[3]	Cons.
Eastern Chronicle	New Glasgow	3,510	1835[3]	Lib.
Weekly News	Truro	3,433	1892[3]	Ind.
Light	Yarmouth	3,302	1890[3]	Ind.
Herald	Yarmouth	3,166	1833	Lib.
Telegram	Yarmouth	3,166	1885	Lib.
Advocate	Pictou	2,612	1893[3]	Ind.
Patriot	Dartmouth	2,508	1898[3]	Ind.
The Hants Journal	Windsor	2,507	1867[3]	Ind.
Advertiser	Kentville	2,500	1871[3]	Ind.
Times	New Waterford	2,158[4]	1930[3]	Ind.
Courier	Digby	2,100	1874[3]	Ind.
Herald	North Sydney	2,000	1872[3]	Ind.
Tribune	Windsor	2,000	1881	Ind.

---

[1] Based on circulation. [2] Not reported. [3] From *McKim's Directory of Canadian Publications, 1938.* [4] From Jan.-Mar. issue of *Canadian Advertising.*

2.—Principal[1] Weekly and Semi-Weekly Newspapers of Canada: Places Where Published, Circulations, Years Established, and Political Affiliations, by Provinces— continued.

Province and Paper.	Where Published.	Circulation.	Year Established.	Political Affiliation.
OTHER WEEKLIES AND SEMI-WEEKLIES—continued.				
New Brunswick (over 2,000 circulation)—				
English—				
St. Croix Courier	St. Stephen	4,947	1865[3]	Ind.
Graphic	Campbellton	2,870	1897[3]	Ind.
Kings County Record	Sussex	2,400	1887[3]	Ind.
Carleton Sentinel	Woodstock	2,050	1837[3]	Lib.
Observer	Hartland	2,015	1909[3]	Ind.-Con.
French—				
L'Evangeline	Moncton	6,500	1885[3]	Ind.
Quebec (over 2,000 circulation)—				
English—				
Chronicle	Three Rivers and Cap de la Madeleine	5,577	1918[3]	Ind.
Messenger (bil.)	Lachine and Dorval	4,750	1929[3]	Ind.
Free Press	Quebec	3,500	1938[3]	[2]
Press	Rouyn, Noranda	3,100	1933[3]	Ind.
Star	Val d'Or-Lamaque	2,830	1935[3]	[2]
Gleaner	Huntingdon	2,765	1863[3]	Ind.
Standard	Shawinigan Falls	2,700	1930[3]	Ind.
News and Eastern Twps. Advocate	St. Johns	2,476	1848[3]	Cons.
French (over 3,000 circulation)—				
Le Guide	St. Marie Beauce	4,842	1930[3]	Cons.
L'Avenir du Nord	St. Jérôme	4,341	1897[3]	Lib.
L'Etoile du Nord	Joliette	4,300	1884[3]	Ind.
Progrès du Saguenay	Chicoutimi	4,291	1887[3]	Ind.
Le Saint-Laurent	Rivière du Loup	4,125	1896[3]	Ind.
L'Avenir du Cap	Cap de la Madeleine	4,100	1935[3]	Ind.
Les Chutes	Shawinigan Falls	4,000	[2]	[2]
Le Progrès de Hull	Hull	4,000	1924[3]	Lib.
L'Echo de Frontenac	Lac Mégantic	3,700	1929[3]	Ind.
Le Canada Français	St. Johns	3,650	1860[3]	Lib.
La Voix Populaire	Val d'Or-Timmins	3,600	[2]	[2]
L'Action Populaire	Joliette	3,592	1913[3]	Ind.
L'Opinion	Hull	3,456	1933[3]	Ind.
Le Bien Public	Trois Rivières and Cap de la Madeleine	3,396	1909[3]	Ind.
Le Clairon	St. Hyacinthe	3,250	1912[3]	Lib.
La Parole	Drummondville	3,237	1926[3]	Ind.
Le Richelieu	St. Johns	3,200	1935[3]	Ind.
La Frontiere	Rouyn	3,063	1937[3]	Ind.
La Voix de l'Est	Granby	3,050	1935[3]	Ind.
Ontario (over 3,000 circulation)—				
Review	Peterborough	7,360	[2]	[2]
Watchman-Warder	Lindsay	6,100	1856[3]	Ind.-Cons.
Reformer	Simcoe	5,602	1858[3]	Ind.
Advertiser	New Toronto	5,360	1917[3]	Cons.
The News	Walkerville	5,100	1920[3]	Ind.
Examiner	Barrie	5,004	1864[3]	Ind.
Thursday Post	Lindsay	5,000	1933[3]	Ind.
News-Letter	Orillia	4,895	1884[3]	Ind.
Packet and Times	Orillia	4,775	1867[3]	Ind.
Times and Guide	Weston	4,715	1890[3]	Cons.
Home News	Sandwich	4,511	1932[3]	Ind.
Weekly Mail	Birchcliffe	4,500	[2]	[2]
Bulletin	Pembroke	4,093	1934[3]	Ind.
Standard-Observer	Pembroke	4,093	1855[3]	Ind.
Saturday Night	Orillia	4,000	1935[3]	[2]
Scarboro Post	Scarboro Bluffs	4,000	1930[3]	Ind.
The Village Post	Forest Hill Village	4,000	1930[3]	Ind.
Northern News	Kirkland Lake	3,989	1922[3]	Ind.
Free Press	Midland	3,805	1882[3]	Ind.
Herald	Penetanguishene	3,805	1881[3]	Ind.
Chronicle	Waterloo	3,797	1856[3]	Ind.
Times	Picton	3,475	1854[3]	Lib.
The Picton Gazette	Picton	3,449	1830[3]	Ind.-Cons.
Georgian Tourist	Midland	3,400	1935[3]	Ind.
Sentinel-Star	Cobourg	3,395	1831[3]	Ind.
Conservator	Brampton	3,159	1873[3]	Cons.
Mercury	Renfrew	3,125	1871[3]	Ind.-Lib.
Courier	Perth	3,085	1834[3]	Ind.

---

[1] Based on circulation. [2] Not reported. [3] From *McKim's Directory of Canadian Publications, 1938.*

2.—Principal[1] Weekly and Semi-Weekly Newspapers of Canada: Places Where Published, Circulations, Years Established, and Political Affiliations, by Provinces —concluded.

Province and Paper.	Where Published.	Circulation.	Year Established.	Political Affiliation.
OTHER WEEKLIES AND SEMI-WEEKLIES—concluded.				
Ontario (over 3,000 circulation)—concluded.				
Journal-Argus	St. Marys	3,010	1853[3]	Ind.
News	Tillsonburg	3,008	1863[3]	Ind.
Beaver	Napanee	3,000	1870[3]	Cons.
Courier-Advocate	Trenton	3,000	1853[3]	Ind.
Manitoba (over 1,500 circulation)—				
Herald	Victoria Beach	4,000	1925[3]	[2]
The Lance	St. Vital	3,150	1931[3]	Ind.
Leader	St. James	2,290	1913[3]	Ind.
Press	Neepawa	2,000	1896[3]	Ind.
Herald and Press	Dauphin	1,934	1907[3]	Ind.
Transcona News	Transcona	1,587	1924[3]	Ind.
Times	Treherne	1,500	1899[3]	Ind.
Saskatchewan (over 1,500 circulation)—				
Enterprise	Yorkton	3,057	1896[3]	Ind.
Sun	Swift Current	2,577	1903[3]	Ind.
News	North Battleford	2,575	1905[3]	Lib.
Optimist	North Battleford	2,560	1911[3]	Ind.
Advocate	Swift Current	2,559	1936[3]	Ind.
Times	Lloydminster	2,075	1905[3]	Ind.
Prairie Messenger	Muenster	1,855	1923[3]	Ind.
Mercury	Estevan	1,567	1903[3]	Ind.
Eagle	Rosetown	1,559	1909[3]	Ind.
Times	Assiniboia	1,548	1912[3]	Ind.
Advance and Canadian	Melville	1,500	1928[3]	Ind.
Review	Weyburn	1,500	1909[3]	Ind.
Moon	Melfort	1,500	1903[3]	Ind.
Alberta (over 1,500 circulation)—				
Herald	Grande Prairie	2,897	1912[3]	Ind.
Advocate	Red Deer	2,640	1901[3]	Ind.
Northern Tribune	Grande Prairie	2,615	1932[3]	Ind.
Canadian	Camrose	2,500	1907[3]	Ind.
Record	Peace River	1,897	1914[3]	Ind.
Times	Wetaskiwin	1,794	1901[3]	Ind.-Lib.
News	Cardston	1,703	1899[3]	Ind.
Free Press	Wetaskiwin	1,640	1911[3]	Ind.
Times	High River	1,635	1905[3]	Ind.
Northern Gazette	Peace River	1,625	1932[3]	Ind.
Herald	Hanna	1,604	1912[3]	Ind.
Mail	Drumheller	1,547	1918[3]	Ind.
Independent	Stettler	1,520	1906[3]	Ind.
British Columbia (over 1,500 circulation)—				
News-Gazette	Point Grey	5,210	[2]	Ind.
British Columbian	New Westminster	5,041	1860[3]	Cons.
The Prospector	Nelson	4,940	1937[3]	Ind.
The Advertiser	Burnaby	4,123	1932[3]	Ind.
North Shore Press	North Vancouver	3,600	1905[3]	Cons.
News	Vernon	3,214	1891[3]	Ind.
Herald	Penticton	2,919	1910[3]	Ind.
Sentinel	Kamloops	2,724	1883[3]	Ind.
Review	Revelstoke	2,200	1914[3]	Ind.-Lib.
Progress	Chilliwack	2,169	1891[3]	N.-P.
Courier	Cranbrook	2,000	1919[3]	Ind.
Comox District Free Press	Courtenay-Cumberland	1,923	1881[3]	Ind.
Courier	Kelowna	1,857	1904[3]	Ind.
Free Press	Fernie	1,800	1898[3]	Ind.
Cowichan Leader	Duncan	1,758	1900[3]	Ind.
News	Lillooet	1,750	1934[3]	[2]
Town Crier	Powell River	1,714	1933[3]	Ind.
Review	Eburne	1,580	1932[3]	Ind.
Star	Princeton	1,500	1900[3]	N.-P.
Yukon and Northwest Territories—				
Prospector	Yellowknife	500	[2]	[2]
Star	Whitehorse	300	1900[3]	Ind.
News	Dawson City	250	1899[3]	[2]
News	Dawson City	250	1899[3]	[2]

---

[1] Based on circulation. [2] Not reported. [3] From *McKim's Directory of Canadian Publications, 1938.*

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established.

NOTE.—Information taken from *Canadian Advertising*, April-June, 1939, except where otherwise indicated.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
GENERAL MAGAZINES (with over 30,000 circulation).				
English—				
Maclean's Magazine	Toronto	270,261	Semi-monthly	1896[2]
National Home Monthly	Winnipeg	253,394	Monthly	1899[2]
Chatelaine	Toronto	240,277	Monthly	1928[2]
Canadian Home Journal	Toronto	237,779	Monthly	1928[2]
Liberty (in Canada)	Toronto	199,267	Weekly	1932[2]
Canadian Veteran	Toronto	56,000[2]	Monthly	1932[2]
The Legionary	Montreal	36,329[2]	Monthly	1918[2]
Saturday Night	Toronto	30,880	Weekly	1887[2]
Canadian National Magazine	Montreal	30,362	Monthly	1914[2]
French—				
L'Action Paroissiale	Montreal	113,330	Monthly	1909[3]
Le Samedi	Montreal	49,291	Weekly	1888[2]
La Voix Nationale	Montreal	46,875	Monthly	1927[2]
La Revue Populaire	Montreal	39,655	Monthly	1907[2]
La Revue Moderne	Montreal	35,000	Monthly	1919[2]
CANADIAN FINANCIAL PAPERS.				
English—				
The Northern Miner	Toronto	19,022	Weekly	1915
The Financial Post	Toronto	17,035	Weekly	1907
Financial Times of Montreal	Montreal	10,500[2]	Weekly	[3]
The Canadian Mining Reporter	Toronto	8,500[2]	Weekly	1929
Canadian Banker	Toronto	7,000[2]	Quarterly	1893
The Quebec Miner	Amos, Que	6,000[2]	Weekly	1934
Monetary Times of Canada	Toronto	5,281	Weekly	[3]
Western Canada Mining News	Vancouver	4,750[2]	Semi-monthly	1899
The Bulletin	Toronto	4,250[2]	Monthly	1893
The Economist and Money and Risks	Toronto	3,750[2]	Monthly	1896
Canadian Finance	Winnipeg	3,152	Semi-monthly	1910
British Columbia Financial Times	Vancouver	2,250[2]	Semi-monthly	1914
Insurance and Financial Review	Toronto	2,000[2]	Monthly	[3]
The Pre-Cambrian	Winnipeg	1,333	Monthly	1927
The New Canadian Business Leader	Winnipeg	1,000[2]	Monthly	1936
Financial News and Western Mining Review	Vancouver	[3]	Weekly	[3]
Mining and Industrial Record	Vancouver	[3]	Monthly	[3]
The Western Miner and Oil Review	Winnipeg	[3]	Semi-monthly	1930
Western Oil Examiner	Calgary	[3]	Weekly	1926
French—				
L'Information Financiere et Industrielle	Montreal	3,750[2]	Weekly	1920
La Finance Canadienne (bil.)	Verdun	[3]	Weekly	[3]
CANADIAN FARM PAPERS.				
English—				
The Family Herald and Weekly Star	Montreal	311,396	Weekly	1870
Free Press Prairie Farmer	Winnipeg	265,161	Weekly	1872
The Country Guide and Nor'-West Farmer	Winnipeg	166,490	Monthly	1882
The Western Producer	Saskatoon	106,871	Weekly	1923
The Farmer's Magazine	Toronto	104,057	Monthly	1909
Farm and Ranch Review	Calgary	86,333	Monthly	1905
The Farmer's Advocate and Home Magazine	London	75,843	Semi-monthly	[3]
The Canadian Countryman	Toronto	72,000	Weekly	1912
Saskatchewan Farmer	Regina	56,103	Semi-monthly	1905
Maritime Farmer and Co-operative Dairyman	Sussex, N.B	23,791	Semi-monthly	1895
The Western Farm Leader	Calgary	20,534	Semi-monthly	1936
The Ontario Milk Producer	Toronto	20,000	Monthly	1924
The Cowbell	Edmonton	16,000[2]	Monthly	1927

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—continued.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
CANADIAN FARM PAPERS—concluded.				
English—continued.				
Canadian Poultry Review	Toronto	15,000[2]	Monthly	1877
Ottawa Farm Journal	Ottawa	13,720	Semi-weekly	[3]
Farmers' Weekly La Presse and Agricultural Magazine	Montreal	12,425	Weekly	1884
Farming	Summerside	10,000	Monthly	1937
Canada Poultryman	Vancouver	9,000[2]	Monthly	1912
Canadian Cattlemen	Calgary	8,000	Quarterly	[3]
Weekly Market News	Winnipeg	7,093	Weekly	1920
Holstein-Friesian Journal	Toronto	6,874	Monthly	1938
Canadian Silver Fox and Fur	Toronto	5,061	Monthly	1935
Country Life in B.C.	Vernon, B.C.	5,000[2]	Monthly	1915
P.E. Island Agriculturalist	Summerside	4,000[2]	Weekly	1880
The Island Farmer	Summerside	3,568	Weekly	1887
Canadian Ayrshire Review (bil.)	Ottawa	2,000[2]	Monthly	1920
Canadian Guernsey Breeders' Journal	Truro, N.S.	1,000[2]	Quarterly	1927
The Grain Belt Farmer and Stockman	Bateman, Sask.	500[2]	Monthly	1934
Market Examiner and Western Farm Journal	Calgary	[3]	Weekly	1917
The Rural Co-operator	Toronto	[3]	Monthly	[3]
French—				
Bulletin des Agriculteurs	Montreal	90,387	Monthly	1918
La Terre de Chez Nous	Montreal	24,334	Weekly	1929
Le Fermier Acadien	Moncton	3,000[2]	Monthly	1927
La Vie Rurale	Quebec	[3]	Monthly	[3]
Other—				
Farmers' Life (Ukrainian)	Winnipeg	10,000[2]	Weekly	1925
Norrona (Norwegian)	Winnipeg	6,250[2]	Weekly	1909
Canada Tidningen (Swedish)	Winnipeg	[3]	Weekly	1897
LEADING CANADIAN BUSINESS PAPERS.				
Advertising—				
Marketing	Toronto	2,028	Weekly	1908
Modern Advertising	Toronto	1,310	Monthly	1934
Air-Conditioning—				
Refrigeration and Air-Conditioning	Gardenvale, Que.	2,199	Monthly	[3]
Automobiles and Accessories —				
Motor Magazine	Toronto	11,211	Semi-annual	[3]
Canadian Service Data Book	Toronto	8,359[4]	Annual	[3]
The Garage Operator	Toronto	5,828[4]	Monthly	1934
Aviation—				
Canadian Aviation	Ottawa	4,028	Monthly	1928
Baking and Confectionery—				
The Bakers' Journal	Toronto	3,458	Monthly	[3]
Canadian Baker and Confectioner	Toronto	3,428	Monthly	1888
Beauty Culture—				
Modern Hairdressing and Beauty Culture	Toronto	6,500	Monthly	1925
Beekeeping—				
Canadian Bee Journal	Oshawa, Ont.	1,500[2]	Monthly	1892
Beverages—				
The Canadian Beverage Review	Toronto	1,189	Bi-monthly	1930
Blacksmithing and Gas Welding—				
Canadian Blacksmith, Welder and Repairman	Winnipeg	3,820[2]	Monthly	1921
Books, Stationery, and Gifts—				
Bookseller and Stationer	Toronto	1,500	Monthly	1884

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported. [4] From *Canadian Advertising*, Jan.-Mar., 1939.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—continued.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
LEADING CANADIAN BUSINESS PAPERS—continued.				
Brotherhoods, etc.—				
Civil Service Digest	Ottawa	5,356	Monthly	[3]
Building Trade—				
Maclean Building Reports	Toronto	10,000	Annual	[3]
Building in Canada	Toronto	5,501	Monthly	1920
The Property Owner and Building Maintenance	Toronto	4,800	Monthly	1928
Western Canada Contractor and Builder	Toronto	3,872	Monthly	[3]
Daily Commercial News and Building Record	Toronto	3,415	Daily	1927
Business Management—				
Business Management	Toronto	5,091	Monthly	[3]
Chemistry—				
Canadian Chemistry and Process Industries	Toronto	2,934	Monthly	1917
China-Glass—				
Pottery, Glass, Housefurnishings, and Toys	Toronto	1,500[2]	Monthly	1909
Collegiate—				
Queen's Journal	Kingston	1,750[2]	Semi-weekly	1873
Credit—				
Credit Men's Journal	Winnipeg	3,000[2]	Monthly	1914
Dentistry—				
Oral Health	Toronto	4,088	Monthly	1910
Journal of the Canadian Dental Association	Toronto	4,038	Monthly	1935
Dogs—				
nd Bench	Toronto	2,650	Monthly	1889
		[illegible]	Semi-monthly	1919
			monthly	1868
				1932
				[illegible]
				0
itoba news				
The Teachers' Magazine (organ of Provincial Association of Protestant Teachers of Quebec)	Montreal			922
The Ubyssey (publication of the University of B.C.)	Vancouver	2,000[2]	Bi-weekly	916
The Educational Review (organ of N.B and P.E.I. Federation)	Saint John	1,800	Monthly	1887
Nova Scotia Teachers' Union Bulletin (organ of N.S. Teachers' Union, Inc.)	Halifax	1,300	Five times a year	1923

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported. [4] From *Canadian Advertising*, Jan.-Mar., 1939.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—continued.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
CANADIAN FARM PAPERS—concluded.				
English—continued.				
Canadian Poultry Review	Toronto	15,000[2]	Monthly	1877
Ottawa Farm Journal	Ottawa	13,720	Semi-weekly	[3]
Farmers' Weekly La Presse and Agricultural Magazine	Montreal	12,425	Weekly	1884
Farming	Summerside	10,000	Monthly	1937
Canada Poultryman	Vancouver	9,000[2]	Monthly	1912
Canadian Cattlemen	Calgary	8,000	Quarterly	[3]
Weekly Market News	Winnipeg	7,093	Weekly	1920
Holstein-Friesian Journal	Toronto	6,874	Monthly	1938
Canadian Silver Fox and Fur	Toronto	5,061	Monthly	1935
Country Life in B.C.	Vernon, B.C.	5,000[2]	Monthly	1915
P.E. Island Agriculturalist	Summerside	4,000[2]	Weekly	1880
The Island Farmer	Summerside	3,568	Weekly	1887
Canadian Ayrshire Review (bil.)	Ottawa	2,000[2]	Monthly	1920
Canadian Guernsey Breeders' Journal.	Truro, N.S.	1,000[2]	Quarterly	1927
The Grain Belt Farmer and Stockman	Bateman, Sask.	500[2]	Monthly	1934
Market Examiner and Western Farm Journal	Calgary	[3]	Weekly	1917
The Rural Co-operator	Toronto	[3]	Monthly	[3]
French—				
Bulletin des Agriculteurs	Montreal	90,387	Monthly	1918
La Terre de Chez Nous	Montreal	24,334	Weekly	1929
Le Fermier Acadien	Moncton	3,000[2]	Monthly	1927
La Vie Rurale	Quebec	[3]	Monthly	[3]
Other—				
Farmers' Life (Ukrainian)	Winnipeg	10,000[2]	Weekly	1925
Norrona (Norwegian)	Winnipeg	6,250[2]	Weekly	1909
Canada Tidningen (Swedish)	Winnipeg	[3]	Weekly	1897

LEADING CANADIAN BUSINESS PAPERS.

ERRATA

P. 766: Under **Advertising.**—read

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
Advertising—				
Canadian Advertising	Toronto	1,310	Quarterly	1928
Modern Advertising	Toronto	2,166	Monthly	1934
Marketing	Toronto	2,028	Weekly	1908

Under **Automobiles and Accessories.**—insert

Canadian Automotive Trade	Toronto	14,161	Monthly	1920
Bus and Truck Transport	Toronto	2,875	Monthly	1925

Beekeeping—				
Canadian Bee Journal	Oshawa, Ont.	1,500[2]	Monthly	1892
Beverages—				
The Canadian Beverage Review	Toronto	1,189	Bi-monthly	1930
Blacksmithing and Gas Welding—				
Canadian Blacksmith, Welder and Repairman	Winnipeg	3,820[2]	Monthly	1921
Books, Stationery, and Gifts—				
Bookseller and Stationer	Toronto	1,500	Monthly	1884

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported. [4] From *Canadian Advertising*, Jan.-Mar., 1939.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—continued.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
LEADING CANADIAN BUSINESS PAPERS—continued.				
Brotherhoods, etc.—				
Civil Service Digest	Ottawa	5,356	Monthly	[3]
Building Trade—				
Maclean Building Reports	Toronto	10,000	Annual	[3]
Building in Canada	Toronto	5,501	Monthly	1920
The Property Owner and Building Maintenance	Toronto	4,800	Monthly	1928
Western Canada Contractor and Builder	Toronto	3,872	Monthly	[3]
Daily Commercial News and Building Record	Toronto	3,415	Daily	1927
Business Management—				
Business Management	Toronto	5,091	Monthly	[3]
Chemistry—				
Canadian Chemistry and Process Industries	Toronto	2,934	Monthly	1917
China-Glass—				
Pottery, Glass, Housefurnishings, and Toys	Toronto	1,500[2]	Monthly	1909
Collegiate—				
Queen's Journal	Kingston	1,750[2]	Semi-weekly	1873
Credit—				
Credit Men's Journal	Winnipeg	3,000[2]	Monthly	1914
Dentistry—				
Oral Health	Toronto	4,088	Monthly	1910
Journal of the Canadian Dental Association	Toronto	4,038	Monthly	1935
Dogs—				
Kennel and Bench	Toronto	2,650	Monthly	1889
Drugs—				
English—				
Drug Merchandising	Toronto	4,250	Semi-monthly	1919
Canadian Pharmaceutical Journal	Toronto	4,204	Semi-monthly	1868
Western Druggist	Vancouver	1,750[2]	Monthly	1932
French—				
Le Pharmacien	Montreal	2,097[4]	Monthly	1928
Dry Goods, Clothing, and Millinery—				
Stylewear	Toronto	2,600	Monthly	1891
The Stylewear Buyer	Toronto	2,600	Monthly	1891
Men's Wear Merchandising	Toronto	2,025	Monthly	1912
Education—				
English—				
The Bulletin (organ of the Saskatchewan Teachers' Federation)	Saskatoon	8,000	Six times a year	1934
A.T.A. Magazine (Alberta Teachers' Association)	Edmonton	7,020	Monthly	1920
The Manitoban (University of Manitoba news sheet)	Winnipeg	2,500[2]	Semi-Weekly	[3]
The Teachers' Magazine (organ of Provincial Association of Protestant Teachers of Quebec)	Montreal	2,000	Five times a year	1922
The Ubyssey (publication of the University of B.C.)	Vancouver	2,000[2]	Bi-weekly	1916
The Educational Review (organ of N.B and P.E.I. Federation)	Saint John	1,800	Monthly	1887
Nova Scotia Teachers' Union Bulletin (organ of N.S. Teachers' Union, Inc.)	Halifax	1,300	Five times a year	1923

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported. [4] From *Canadian Advertising*, Jan.-Mar., 1939.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—continued.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
LEADING CANADIAN BUSINESS PAPERS—continued.				
Education—concluded.				
French—				
L'Ecole Canadienne (publication of the Catholic School Commission of Montreal)	Montreal	5,000[2]	Monthly	1924
Electrical Equipment—				
Electrical News and Engineering	Toronto	3,991	Semi-monthly	1891
Electrical Digest	Toronto	3,292	Monthly	1932
Electrical Appliances and Supplies	Toronto	3,193	Monthly	1925
Engineering—				
The Engineering Journal	Montreal	4,817	Monthly	1918
The Engineering Catalogue	Montreal	4,508	Annual	[3]
Engineering and Contract Record	Toronto	3,290	Weekly	1886
Canadian Engineer	Toronto	3,262	Weekly	1893
Exports—				
Canadian Exporter	Montreal	2,750[2]	Twelve issues a year	1931
Fisheries—				
Canadian Fisherman	Gardenvale, Que.	3,753	Monthly	1914
Western Fisheries	Vancouver	1,708	Monthly	1930
Florists—				
The Canadian Florist	Oshawa, Ont.	1,000[2]	Bi-weekly	1905
Food and Canning—				
Canadian Food Packer	Gardenvale, Que.	1,500	Monthly	1930
Fraternal Societies—				
The Alberta Oddfellow	Wainwright, Alta.	[3]	Monthly	[3]
Fuel and Coal—				
Western Canada Coal Review	Winnipeg	3,154	Monthly	1918
Funeral Service—				
Canadian Cemetery Service and Memorial Craftsman	Toronto	1,000[2]	Bi-monthly	1930
Furniture and Furnishings—				
Furniture and Furnishings	Toronto	1,800	Monthly	1911
Canadian Woodworker and Furniture Manufacturer	Toronto	1,388	Monthly	1901
Fur Trade—				
Fur of Canada	Winnipeg	5,000	Monthly	1935
Fur Trade Journal of Canada	Toronto	3,069	Monthly	1923
General Retail Trade—				
English—				
The Beacon	Calgary	5,497	Quarterly	1938
General Merchant of Canada	Toronto	4,000	Quarterly	1928
French—				
Le Prix Courant	Montreal	3,966	Monthly	1887
Giftware—				
Giftware	Toronto	3,000[2]	Bi-monthly	1932
Grain Trade—				
Canadian Milling and Feed Journal	Montreal	1,200	Monthly	1919
Grocery Trade—				
English—				
Prairie Grocer and Provisioner	Winnipeg	5,633	Monthly	1928
Canadian Grocer	Toronto	4,863	Semi-monthly	1886
French—				
Le Détaillant en Produits Alimentaires	Montreal	5,766	Monthly	1926

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938* [3] Not reported.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—continued.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
LEADING CANADIAN BUSINESS PAPERS—continued.				
Hardware Trade—				
English—				
Hardware in Canada	Toronto	3,585	Monthly	1909
Hardware and Metal	Toronto	3,505	Bi-weekly	[3]
French—				
Le Détaillant en Quincaillerie	Montreal	3,966	Monthly	1936
Health—				
Health	Toronto	10,228[2]	Quarterly	1933
Your Health (organ of B.C. Tuberculosis Society)	Vancouver	2,000[2]	Monthly	1919
Heating, Plumbing—				
Sanitary Age	Toronto	3,587	Monthly	1923
Hotels—				
Hotel and Restaurant Management	Toronto	5,262	Monthly	1933
Canadian Hotel Review and Restaurant	Toronto	4,537	Monthly	1922
Implement Trade—				
Canadian Farm Implements	Winnipeg	5,680[2]	Monthly	1904
Insurance—				
Canadian Underwriter	Toronto	5,053	Semi-monthly	1933
Insurance Agent and Broker	Montreal	4,000	Monthly	1922
Jewellery and Optometry—				
Trader and Canadian Jeweller	Toronto	1,750[2]	Eight times a year	1879
Laundry Trade—				
Laundry and Dry Cleaning Journal of Canada	Toronto	1,579	Monthly	1928
Leather Trade—				
Shoe and Leather Journal	Toronto	2,584	Monthly	1887
Legal—				
Bench and Bar	Montreal	2,906	Monthly	[3]
Lumbering—				
Canada Lumberman	Toronto	2,405	Semi-monthly	1880
B.C. Lumberman	Vancouver	1,989	Monthly	1917
Prairie Lumberman	Winnipeg	1,000[2]	Monthly	1920
Manufacturing—				
Industrial Canada	Toronto	4,262[4]	Monthly	1900
Manufacturing and Industrial Engineering	Toronto	2,989[4]	Monthly	1926
Meats and Provisions—				
Canadian Meat and Provision Buyer	Toronto	4,863	Monthly	[3]
Medicine, Hospitals, Nursing, etc.—				
English—				
The Canadian Doctor	Gardenvale, Que.	11,594	Monthly	[3]
Canadian Medical Association Journal	Montreal	4,860	Monthly	1911
French—				
L'Action Médicale	Montreal	3,000[2]	Monthly	1924
Metal Working—				
Canadian Machinery and Manufacturing News	Toronto	3,201	Monthly	1905
Milk and Milk Products—				
The Canadian Dairy and Ice Cream Journal	Toronto	2,598	Monthly	1922

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported.

3.—Leading[1] Magazines and Special Papers of Canada Individually Classified According to Purpose, Place where Published, Circulation, Frequency of Issue, and Year Established—concluded.

Name.	Where Published.	Circulation.	Frequency of Issue.	Year Established.
LEADING CANADIAN BUSINESS PAPERS—concluded.				
Mining Industry—				
Canadian Mining Journal	Gardenvale, Que.	3,392	Monthly	1879
Canadian Mining and Metallurgical Bulletin	Montreal	3,392	Monthly	1898
Moving Pictures—				
Canadian Moving Picture Digest	Toronto	1,250[2]	Weekly	1915
Municipal—				
The Municipal World	St. Thomas, Ont.	5,067	Monthly	1891
Paint and Varnish—				
Canadian Paint and Varnish Magazine.	Toronto	2,101	Monthly	1927
Paper—				
Pulp and Paper Magazine of Canada	Gardenvale, Que.	2,698	Monthly	1903
Postal Service—				
The Canadian Postmaster	Estevan, Sask.	13,000	Monthly	1927
Printing Trades—				
Canadian Printer and Publisher	Toronto	1,710	Monthly	1891
Power and Power Plants—				
Modern Power and Engineering	Toronto	6,000	Monthly	1907
Provincial—				
Port and Province	Halifax	3,250[2]	Quarterly	1932
Purchasing—				
Canadian Purchaser	Toronto	2,000	Monthly	1922
Radio—				
Radio Trade Builder	Toronto	5,008	Monthly	1925
Radio and Electrical Sales	Toronto	4,584	Six times a year	1923
Railways—				
Canadian Official Railway Guide	Montreal	4,000[2]	Monthly	1866
Canadian Transportation	Toronto	1,616[2]	Monthly	1898
Religious Institutions—				
French—				
Le Fournisseur d'institutions Religieuses	Montreal	2,100[4]	Monthly	1935
Shipping—				
Harbour and Shipping	Vancouver	1,250[2]	Monthly	1918
Sports—				
Sport Goods Journal of Canada	Toronto	2,750[2]	Monthly	1923
Canadian Lawn Tennis and Badminton	Montreal	1,000	Monthly	1924
Storage and Warehousing—				
Canadian Storage and Distribution Magazine	Vancouver	998[4]	Bi-monthly	1916
Telephone Service—				
The Canadian Telephone Journal	Toronto	1,233	Monthly	1934
Textiles—				
Canadian Textile Journal	Montreal	1,447	Bi-weekly	1883
Tobacco Trade—				
Canadian Cigar and Tobacco Journal	Toronto	1,750[2]	Monthly	1894
Travellers (Commercial)—				
Associated Canadian Travelers' Magazine	Calgary	[3]	Monthly	[3]

---

[1] Based on circulation. [2] From *McKim's Directory of Canadian Publications, 1938.* [3] Not reported. [4] From *Canadian Advertising*, Jan.-Mar., 1939.

4.—Publications in Canada, by Frequency of Issue, 1921-38.

NOTE.—Compiled from *McKim's Directory of Canadian Publications*. Figures do not include Newfoundland.

Year.	Daily.	Tri-Weekly.	Semi-Weekly.	Weekly.	Bi-Weekly and Semi-Monthly.	Monthly.	Bi-Monthly and Quarterly.	Miscellaneous.	Total.
1921....	121	9	36	990	48	297	20	4	1,525
1922....	117	10	34	1,012	43	295	22	2	1,535
1923....	110	8	30	966	48	299	20	Nil	1,481
1924....	108	9	30	968	44	328	29	9	1,525
1925....	116	6	32	940	44	353	36	11	1,538
1926....	113	7	28	929	46	365	38	10	1,536
1927....	113	6	23	935	48	385	37	9	1,556
1928....	113	7	21	950	56	390	38	15	1,590
1929....	114	5	21	958	56	384	37	19	1,594
1930....	113	4	20	994	47	402	35	18	1,633
1931....	112	8	18	965	53	425	36	24	1,641
1932....	110	7	20	975	50	415	47	27	1,651
1933....	110	6	19	960	51	426	60	38	1,670
1934....	113	6	25	986	55	454	56	38	1,733
1935....	115	8	22	1,000	58	449	66	50	1,768
1936....	115	9	24	996	56	450	77	52	1,779
1937....	114	9	25	1,000	56	450	73	60	1,787
1938....	112	9	26	995	61	463	79	59	1,804

5.—Circulations[1] of Daily, Semi-Weekly, and Weekly Publications in Canada, 1921-38, with Details by Provinces, 1938.

NOTE.—Figures for circulation given to the nearest thousand as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications*.

Year.	Daily.[2]		Semi-Weekly.[3]		Weekly.[4]	
	No.	Circulation.	No.	Circulation.	No.	Circulation.
1921	111	1,716,000	39	155,000	831	2,316,000
1922	107	1,744,000	41	154,000	841	2,370,000
1923	103	1,732,000	35	102,000	850	2,277,000
1924	106	1,821,000	35	104,000	796	2,488,000
1925	109	1,783,000	30	176,000	670	2,328,000
1926	112	1,943,000	26	93,000	822	2,729,000
1927	112	2,001,000	26	93,000	821	3,008,000
1928	112	2,087,000	25	89,000	816	3,081,000
1929	116	2,197,000	24	84,000	825	3,264,000
1930	113	2,212,000	26	106,000	858	3,318,000
1931	111	2,233,000	26	102,000	867	3,445,000
1932	103	2,115,000	25	102,000	883	3,726,000
1933	106	2,052,000	24	91,000	860	3,349,000
1934	107	2,147,000	30	127,000	867	3,663,000
1935	109	2,230,000	28	113,000	884	3,929,000
1937	110	2,357,000	34	127,000	898	3,916,000
1938.						
Prince Edward Island	2	9,773	Nil	–	4	14,750
Nova Scotia	8	117,468	3	6,596	38	75,708
New Brunswick	5	57,694	3	3,750	20	46,411
Quebec	18	735,594	Nil	–	130	1,321,753
Ontario	40	950,843	13	74,132	316	1,709,460
Manitoba	7	116,799	5	27,713	88	480,898
Saskatchewan	2	13,960	3	13,434	144	233,717
Alberta	6	94,127	1	2,000	90	130,767
British Columbia[5]	14	218,826	7	10,812	78	182,486
Totals	**102**	**2,315,084**	**35**	**138,437**	**908**	**4,195,950**

---

[1] For newspapers—average for 12 months ended Sept. 30; for periodicals—average for 6 months ended Dec. 31. [2] Includes the sum of morning and evening editions of the same newspaper. Also includes papers issued five times a week. [3] Includes papers published two, three, or four times a week. [4] Includes special Saturday and Sunday editions of daily papers. [5] Includes figures for Yukon.

6.—Circulations[1] of Daily, Semi-Weekly, and Weekly Publications, in Cities of 20,000 Population or Over, 1937.

NOTE.—Figures for circulation given in round numbers as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications.*

City.	Census of 1931.		Daily.[2]		Semi-Weekly.[3]		Weekly.[4]	
	Population.	Households.	No.	Circulation.	No.	Circulation.	No.	Circulation.
Montreal........	818,577	170,811	10	426,000	Nil	–	37	1,004,000
Toronto.........	631,207	149,538	8	647,000	2	13,000	50	1,020,000
Vancouver.......	246,593	60,530	6	188,000	3	4,000	15	75,000
Winnipeg........	218,785	48,294	4	108,000	4	25,000	26	432,000
Hamilton........	155,547	37,217	1	54,000	Nil	–	3	33,000
Quebec..........	130,594	23,043	5	144,000	“	–	8	24,000
Ottawa..........	126,872	27,658	3	84,000	1	14,000	Nil	–
Calgary.........	83,761	20,371	2	43,000	Nil	–	1	16,000
Edmonton.......	79,197	18,868	2	47,000	1	2,000	7	24,000
London..........	71,148	17,549	1	51,000	Nil	–	4	56,000
Windsor.........	63,108	14,900	1	45,000	“	–	Nil	–
Verdun..........	60,745	13,914	Nil	–	“	–	2	31,000
Halifax..........	59,275	12,147	4	91,000	“	–	3	4,000
Regina..........	53,209	12,017	2	39,000	“	–	2	9,000
Saint John.......	47,514	10,890	3	41,000	“	–	1	4,000
Saskatoon.......	43,291	9,698	1	19,000	1	2,000	3	123,000
Victoria.........	39,082	10,431	3	25,000	Nil	–	Nil	–
Three Rivers....	35,450	6,191	1	12,000	“	–	2	10,000
Kitchener.......	30,793	7,189	1	12,000	“	–	Nil	–
Brantford.......	30,107	7,487	1	12,000	“	–	“	–
Hull............	29,433	5,394	Nil	–	“	–	3	11,000
Sherbrooke......	28,933	5,666	2	17,000	“	–	2	14,000
Outremont......	28,641	6,086	Nil	–	“	–	Nil	–
Fort William....	26,277	5,576	1	6,000	“	–	1	12,000
St. Catharines...	24,753	6,115	1	11,000	“	–	Nil	–
Westmount......	24,235	5,454	Nil	–	“	–	1	7,000
Kingston........	23,439	5,514	1	11,000	1	2,000	1	4,000
Oshawa.........	23,439	5,605	1	2,000	Nil	–	2	11,000
Sydney..........	23,089	4,494	1	12,000	“	–	Nil	–
Sault Ste. Marie.	23,082	4,989	1	6,000	“	–	“	–
Peterborough....	22.327	5,295	1	9,000	“	–	“	–
Moose Jaw......	21,299	5,176	1	5,000	“	–	2	9,000
Guelph..........	21,075	5,096	1	7,000	“	–	Nil	–
Glace Bay.......	20,706	3,819	1	7,000	“	–	“	–
Moncton.........	20,689	4,201	2	13,000	“	–	1	6,000
Totals.......	**3,386,272**	**757,223**	**73**	**2,194,000**	**13**	**62,000**	**177**	**2,939,000**

[1] For newspapers—averages for 12 months ended Sept. 30; for periodicals—averages for 6 months ended Dec. 31. [2] Includes the sum of morning and evening editions of the same newspaper. Also includes papers issued five times a week. [3] Includes papers published two, three, or four times a week. [4] Includes special Saturday and Sunday editions of daily papers.

Publications in the French Language.—Such publications include a comparatively large proportion of periodicals dealing with literature, music, religion, and similar cultural subjects, and the circulations of many of these periodicals are not reported in *McKim's Directory of Canadian Publications.* Publications for which the circulations are not reported are not included in either the number or circulation figures of Table 7, p. 773. Since the majority of such unreported publications are likely to have fairly small circulations, the figures of the table represent a larger proportion of total circulation than of the total number of publications. Among daily newspapers, there is only one small publication unreported in each year.

7.—Numbers and Circulations of French Language Publications in Canada, by Provinces, 1936 and 1937.

NOTE.—Figures of circulation given to nearest thousand as some publications are not exactly reported. Compiled from *McKim's Directory of Canadian Publications.*

Year and Province.	Daily.		Weekly.		Semi-Monthly and Monthly.		Other.[1]	
	No.	Circulation.	No.	Circulation.	No.	Circulation.	No.	Circulation.
1936.								
New Brunswick	Nil	–	2	8,000	1	3,000	Nil	–
Quebec	11	381,000[2]	84	747,000[2,3]	63	745,000[3]	10	258,000
Ontario	1	15,000	3	21,000[3]	3	22,000	1	2,000
Manitoba	Nil	–	1	7,000	2	5,000	Nil	–
Saskatchewan	"	–	2	9,000[3]	Nil	–	"	–
Alberta	"	–	1	3,000	"	–	"	–
Totals, 1936	**12**	**396,000**	**93**	**795,000**	**69**	**775,000**	**11**	**260,000**
1937.								
New Brunswick	Nil	–	2	7,000	1	3,000	Nil	–
Quebec	11	395,000[2]	92	607,000[3]	76	849,000[3]	11	242,000[3]
Ontario	1	16,000	3	5,000[3]	5	23,000	Nil	–
Manitoba	Nil	–	1	7,000	2	5,000	1	1,000
Saskatchewan	"	–	3	10,000[3]	Nil	–	Nil	–
Alberta	"	–	1	2,000	"	–	"	–
Totals, 1937	**12**	**411,000**	**102**	**638,000**	**84**	**880,000**	**12**	**243,000**

---

[1] Bi-monthly, quarterly, and annual.

[2] Includes special editions for United States circulation averaging: in 1936, 11,300 daily and 11,300 weekly; in 1937, 10,818 daily.

[3] Includes bilingual publications.

CHAPTER XIX.—LABOUR AND WAGES.*

PART I.—LABOUR.

Section 1.—Occupations of the Wage-Earning Population.

The total population in gainful occupations is recorded at the census. In Section 15 of Chapter IV, pp. 128-146 of the 1937 Year Book, the gainfully occupied in 1931 were dealt with rather extensively under the heading "Occupations of the Canadian People". Statistics of the numerical and percentage distribution of the wage-earning section of the gainfully occupied, by industrial and occupational groups, were published at pp. 741-742 of the 1938 edition of the Year Book, and a table at p. 732 of the 1937 edition showed the numerical and percentage distribution of wage-earners, by age groups, as at the Census of 1931.

Subsection 1.—Occupational Trends in Canada, 1891-1931.

A "gainful occupation", as defined by the Census of Canada, is one by which the person pursuing it earns money or a money equivalent or in which he assists in the production of marketable goods. Wives or children assisting heads in the conduct of family enterprises are considered to be gainfully occupied if regularly employed even though they may receive no fixed money payment. For example, a farmer's son, not attending school, who is fully employed on the family farm is recorded in the census as gainfully occupied though he may be working in a "no pay" capacity on the farm. On the other hand, members of the family of working age not actively employed at farm work are not included among the gainfully occupied. Persons retired from gainful occupations, the disabled who are permanently unemployable, or inmates of institutions are not counted as engaged in gainful occupations.

Unemployed persons are counted among the gainfully occupied population in the census, persons out of work on the census date being asked to report the occupation in which usually employed or the occupation in which last regularly employed.

In Table 1 the gainfully occupied are classified by occupation groups, showing the percentage importance of each group by census years over the period 1891 to 1931, for Canada and the provinces.

The occupation group totals in this table account for every person following any one of the types of occupation coming under the specified groups listed here, irrespective of the industry in which the person might be employed. For example, all persons directly engaged in the making or repairing of commodities, e.g., bakers, tailors, machinists, printers, etc., are classified under "Manufacturing" in this table whether employed in the manufacturing industry or not. Similarly, all persons following such a transport occupation as truck driver are listed under "Transportation", whether employed by a trucking concern or factory, store, etc. Clerical workers constitute a separate group as do labourers in all but the primary industries. The labourer on a farm is usually a farm labourer and in a mine, a mine-working labourer, but the labourer in a steel mill is not necessarily a metal worker or engaged in some 'process' occupation, nor is the labourer on a steam railway always a transport worker.

---

* The sections and subsections of this chapter, with the exceptions of Sections 1, 3, 7, and 9 (Subsections 3, 4, and 5) and Section 10, all of Part I, and Section 4 of Part II, have been revised by, or under the direction of W. M. Dickson, Deputy Minister, Department of Labour, Ottawa. The information in Section 3, Part I, has been obtained through the courtesy of the Provincial Departments of Labour or Bureaus of Labour, and that in Section 7, Part I, has been revised by the chairmen of the respective provincial Workmen's Compensation Boards. Section 10 has been revised under the direction of Dr. W. C. Clark, Deputy Minister, Department of Finance, Ottawa. The remaining sections have been prepared and revised in the Dominion Bureau of Statistics.

The most significant feature of the trend of occupations in Canada during the period 1891 to 1931, as shown by Table **1**, is the decline shown in the relative importance of agricultural pursuits. In 1891 over one-half of all males in gainful occupations were employed in agriculture, while in 1931 the proportion had fallen to just over one-third. This decline has been much more pronounced in the eastern provinces than in the Prairie Provinces and British Columbia.

In most of the provinces the percentage of the gainfully occupied in other primary pursuits has not changed materially over this 40-year period. In British Columbia, however, the proportion of total males in fishing and logging occupations has dropped from 12·9 p.c. to 8·5 p.c. over the period while the percentage importance of mining occupations has declined from 10·4 p.c. to 3·9 p.c. Incidentally, the actual number in mining occupations in this province fell from over 14,000 at the beginning of the century to just over 10,000 in 1931.

The relative importance of manufacturing occupations in providing employment for male workers did not change materially in any of the provinces during the period under review, although, as would be expected, such village manufacturers as millers, coopers, harness-makers, and blacksmiths show declining trends. In Ontario and British Columbia the growth of manufacturing occupations has been somewhat more rapid than for all occupations combined. Among females there has been a very noticeable decline in the relative importance of manufacturing occupations over this period, the decrease in the numbers of dressmakers and milliners contributing largely to this result. The numerical increase in the number of females in these occupations has been considerable, but it has been overshadowed by the remarkable expansion in the numbers in clerical occupations and the services.

The number of males in construction occupations increased by over 100 p.c. in the 40-year period ended in 1931 which corresponds closely with the rate of increase shown for the total gainfully occupied males over the same period. Brick and stone masons, however, increased by only 9·1 p.c., but electricians, in particular, plumbers, and painters all recorded rapid growth. It is interesting to observe that the importance of construction occupations in the Prairie Provinces reached its height in 1911, the culmination of a period of outstanding development in the West.

There were over four times as many males in transport occupations in 1931 as in 1891, the percentage of all males in this group rising from 4·3 p.c. in 1891 to 8·3 p.c. in 1931. The increase in the number in railway transportation was quite rapid up until 1921, while from 1921 to 1931 road transport occupations showed exceptional growth. The phenomenal increase in the number of females in this group of occupations has been due almost entirely to the spectacular growth in the number of telephone operators during the past 30 or 40 years. Since 1921 the increase in the number of females in this occupation has not been appreciable.

The number of persons in trade and finance occupations has also increased at a more rapid rate than in all occupations combined, though the rate of growth since 1911 has been less pronounced in most provinces.

There were three times as many males in professional occupations in 1931 as in 1891 and almost five times as many females as in the earlier year, the proportion of all males and females in these occupations rising from 2·4 p.c. to 3·2 p.c. for males and from 12·3 p.c. to 17·6 p.c. for females over the period. Professors and college principals increased by no less than 867·5 p.c., professional engineers by 453·9 p.c., and dentists by 440·0 p.c.; the rate of increase for clergymen and priests, *viz.*, 76·7, p.c., not only failed to approximate the increase shown for most professional occupations, but actually was less than the 130·9 p.c. increase in the gainfully occupied male population over the period 1891 to 1931.

In personal services it is noteworthy that, while males in the barbering and hairdressing occupations showed an increase of 389·0 p.c. over the 40-year period, females in hairdressing and beauty parlours increased by no less than 7,832·9 p.c. It is interesting to note that although one-third of all females were employed in the personal services in 1931, there has been a decline in the relative importance of this occupational group since 1891, when over half of all female workers found employment in the group. This decline has been general throughout Canada, though it should be pointed out that the importance of the personal service occupations has been on the increase since 1921.

Clerical occupations have continued to grow at a more rapid rate than the gainfully occupied as a whole. For females, in particular, employment in clerical occupations has expanded at a remarkable rate, the number in these occupations rising from about 3,000 to approximately 117,000 from 1891 to 1931. In Ontario and British Columbia about one-fifth of all female workers in 1931 found employment in clerical occupations.

The class "labourers" is difficult to compare from census to census due to changes in the method of classification and, to some extent, in the quality of enumeration. However, there does seem to have been an increase in the relative importance of this class since 1891, a marked growth having taken place between 1901 and 1911. It should be mentioned that the labourers included in this class in Table **1** are exclusive of those in the primary industries. Agricultural, mining, etc., labourers are included in their respective groups in this table.

1.—Numbers and Percentages of the Gainfully Occupied, 10 Years of Age or Over Classified According to Sex, in each Occupational Group, by Economic Areas, 1891-1931.

NOTE.—Occupations for 1891 to 1921, inclusive, were rearranged on the basis of the 1931 classification, though some adjustment of the 1931 grouping was necessary.

Occupational Group.	1891.		1901.		1911.		1921.		1931.	
	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.
					MALES.					
Maritime Provinces.										
Agriculture.........	131,021[1]	50·2[1]	121,860	46·0	111,141	39·7	111,808	37·7	105,877	35·4
Fishing, logging....	21,159[2]	8·1[2]	21,307[3]	8·0[3]	26,547[4]	9·5[4]	23,127[5]	7·8[5]	22,556	7·5
Mining, quarrying..	6,219	2·4	8,190	3·1	17,908[6]	6·4[6]	15,316	5·2	15,902	5·3
Manufacturing......	26,000	10·0	42,978[7]	16·2[7]	24,949	8·9	25,431	8·6	24,112	8·1
Construction.......	15,754	6·0			12,939	4·6	17,022	5·7	15,329	5·1
Transportation.....	14,504	5·6	26,417[8]	10·0[8]	18,085	6·5	20,783	7·0	24,045	8·0
Trade and finance..	11,520	4·4			16,949	6·0	20,277	6·8	20,139	6·7
Service............	13,687	5·2	16,916	6·4	11,548	4·1	15,098	5·1	17,274	5·8
Professional....	*5,387*	*2·1*	[9]	[9]	*5,181*	*1·9*	*6,268*	*2·1*	*6,704*	*2·2*
Personal.......	*6,003*	*2·3*	*9,191*	*3·5*	*5·005*	*1·8*	*5,119*	*1·7*	*7,447*	*2·5*
Clerical............	3,011[10]	1·2[10]	5,693	2·1	7,263	2·6	9,127[11]	3·1[11]	7,555	2·5
Labourers..........	17,759	6·8	21,591	8·1	32,893	11·7	38,468	13·0	46,008	15·4
All Occupations[12]	**260,918**	**100·0**	**265,026**	**100·0**	**280,222**	**100·0**	**296,773**	**100·0**	**298,902**	**100·0**

For footnotes, see end of table, p. 778.

1.—Numbers and Percentages of the Gainfully Occupied, 10 Years of Age or Over Classified According to Sex, in each Occupational Group, by Economic Areas, 1891-1931—continued.

Occupational Group.	1891.		1901.		1911.		1921.		1931.	
	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.
MALES—concluded.										
Quebec.										
Agriculture	204,552[1]	51·3[1]	194,381	44·7	201,599	36·5	217,416	33·6	225,914	27·4
Fishing, logging	8,471[2]	2·1[2]	7,868[3]	1·8[3]	15,709[4]	2·8[4]	14,843[5]	2·3[5]	21,975	2·7
Mining, quarrying	2,119	0·5	1,338	0·3	5,560[6]	1·0[6]	4,118	0·6	6,128	0·7
Manufacturing	52,058	13·0	101,884[7]	23·4[7]	79,288	14·4	87,793	13·6	111,352	13·5
Construction	24,183	6·1			35,085	6·4	44,887	6·9	62,831	7·6
Transportation	15,533	3·9	45,171[8]	10·4[8]	34,952	6·3	41,263	6·4	66,018	8·0
Trade and finance	23,788	6·0			51,131	9·3	63,175	9·8	78,388	9·5
Service	23,918	6·0	27,513	6·3	33,729	6·1	46,116	7·1	73,714	9·0
Professional	*9,332*	*2·3*	[9]	[9]	*14,165*	*2·6*	*20,388*	*3·2*	*29,466*	*3·6*
Personal	*9,307*	*2·3*	*13,202*	*3·0*	*15,806*	*2·9*	*16,753*	*2·6*	*35,021*	*4·3*
Clerical	5,998[10]	1·5[10]	15,396	3·5	17,219	3·1	33,086[11]	5·1[11]	43,258	5·3
Labourers	36,865	9·2	41,241	9·5	77,868	14·1	91,368	14·1	133,368	16·2
All Occupations[12]	**399,039**	**100·0**	**435,034**	**100·0**	**552,140**	**100·0**	**646,440**	**100·0**	**823,287**	**100·0**
Ontario.										
Agriculture	332,037[1]	52·2[1]	302,533	46·9	301,347	36·0	289,701	31·4	298,597	27·2
Fishing, logging	6,640[2]	1·0[2]	8,239[3]	1·3[3]	14,160[4]	1·7[4]	10,318[5]	1·1[5]	15,114	1·4
Mining, quarrying	1,852	0·3	3,902	0·6	16,738[6]	2·0[6]	8,678	0·9	14,848	1·4
Manufacturing	88,736	14·0	145,249[7]	22·5[7]	129,289	15·5	150,226	16·3	181,985	16·6
Construction	40,145	6·3			53,743	6·4	64,119	6·9	76,638	7·0
Transportation	25,270	4·0	78,029[8]	12·1[8]	56,010	6·7	70,693	7·7	102,450	9·3
Trade and finance	39,247	6·2			70,719	8·5	91,677	9·9	111,822	10·2
Service	40,015	6·3	36,719	5·7	49,304	5·9	68,502	7·4	96,942	8·8
Professional	*16,621*	*2·6*	[9]	[9]	*19,286*	*2·3*	*28,262*	*3·1*	*38,666*	*3·5*
Personal	*15,420*	*2·4*	*13,850*	*2·1*	*23,762*	*2·8*	*25,888*	*2·6*	*43,653*	*4·0*
Clerical	10,121[10]	1·6[10]	19,689	3·0	27,538	3·3	51,092[11]	5·5[11]	54,267	4·9
Labourers	50,589	8·0	50,917	7·9	117,287	14·0	116,658	12·6	143,435	13·1
All Occupations[12]	**635,966**	**100·0**	**645,557**	**100·0**	**836,135**	**100·0**	**923,413**	**100·0**	**1,096,726**	**100·0**
Prairie Provinces.										
Agriculture	47,184[1]	66·0[1]	78,906	64·3	279,724	55·9	370,358	59·5	435,169	55·8
Fishing, logging	522[2]	0·7[2]	1,005[3]	0·8[3]	4,522[4]	0·9[4]	2,452[5]	0·4[5]	9,420	1·2
Mining, quarrying	528	0·7	819	0·7	6,695[6]	1·3[6]	9,299	1·5	11,368	1·5
Manufacturing	3,590	5·0	11,743[7]	9·6[7]	23,776	4·7	31,568	5·1	45,641	5·9
Construction	2,691	3·8			30,169	6·0	22,123	3·6	29,162	3·7
Transportation	2,417	3·4	11,635[8]	9·5[8]	29,120	5·8	35,499	5·7	50,366	6·5
Trade and finance	3,993	5·6			37,600	7·5	51,115	8·2	59,821	7·7
Service	5,102	7·1	8,539	7·0	27,081	5·4	41,341	6·6	53,097	6·8
Professional	*1,800*	*2·5*	[9]	[9]	*9,874*	*2·0*	*15,488*	*2·5*	*19,810*	*2·5*
Personal	*1,504*	*2·1*	*3,642*	*3·0*	*14,057*	*2·8*	*16,793*	*2·7*	*25,424*	*3·3*
Clerical	1,011[10]	1·4[10]	2,968	2·4	13,851	2·8	23,994[11]	3·9[11]	24,820	3·2
Labourers	4,345	6·1	6,980	5·7	48,296	9·6	33,783	5·4	60,865	7·8
All Occupations[12]	**71,479**	**100·0**	**122,684**	**100·0**	**500,834**	**100·0**	**622,179**	**100·0**	**779,941**	**100·0**
British Columbia.										
Agriculture	8,219[1]	18·3[1]	10,244	13·4	24,037	12·7	34,378	17·7	42,209	16·1
Fishing, logging	5,805[2]	12·9[2]	4,796[3]	6·3[3]	16,267[4]	8·6[4]	17,069[5]	8·8[5]	22,338	8·5
Mining, quarrying	4,692	10·4	14,092	18·4	15,503[6]	8·2[6]	10,680	5·5	10,339	3·9
Manufacturing	5,477	12·2	16,273[7]	21·2[7]	18,137	9·6	22,201	11·4	31,733	12·1
Construction	3,832	8·5			18,584	9·8	14,049	7·2	19,010	7·2
Transportation	2,602	5·8	11,704[8]	15·3[8]	15.419	8·1	16,828	8·7	28,365	10·8
Trade and finance	2,582	5·7			16,755	8·8	19,583	10·1	25,881	9·9
Service	4,811	10·7	10,936	14·3	17,392	9·2	23,044	11·9	29,546	11·3
Professional	*1,302*	*2·9*	[9]	[9]	*5,214*	*2·8*	*7,667*	*3·9*	*9,077*	*3·5*
Personal	*2,874*	*6·4*	*7,903*	*10·3*	*10,366*	*5·5*	*10,767*	*5·5*	*16,622*	*6·3*
Clerical	888[10]	2·0[10]	2,474	3·2	6,724	3·5	10,026[11]	5·2[11]	11,291	4·3
Labourers	5,988	13·3	5,997	7·8	40,664	21·5	25,934	13·4	41,732	15·9
All Occupations[12]	**44,984**	**100·0**	**76,582**	**100·0**	**189,482**	**100·0**	**194,214**	**100·0**	**262,515**	**100·0**
Canada.										
Agriculture	723,013[1]	51·2[1]	707,924	45·8	917,848	38·9	1,023,661	38·2	1,107,766	34·0
Fishing, logging	42,597[2]	3·0[2]	43,215[3]	2·8[3]	77,205[4]	3·3[4]	67,809[5]	2·5[5]	91,403	2·8
Mining, quarrying	15,410	1·1	28,341	1·8	62,404[6]	2·7[6]	48,091	1·8	58,585	1·8
Manufacturing	175,861	12·5	229,627	14·8	275,439	11·7	317,219	11·8	394,823	12·1
Construction	86,605	6·1	89,100	5·8	150,520	6·4	162,200	6·0	202,970	6·2
Transportation	60,326	4·3	81,161	5·3	153,586	6·5	185,666	6·9	271,244	8·3
Trade and finance	81,130	5·7	91,795	5·9	193,154	8·2	245,827	9·2	296,051	9·1
Service	87,533	6·2	100,623	6·5	139,054	5·9	194,101	7·2	270,573	8·3
Professional	*34,442*	*2·4*	*39,521*	*2·6*	*53,720*	*2·3*	*78,073*	*2·9*	*103,723*	*3·2*
Personal	*35,108*	*2·5*	*47,788*	*3·1*	*68,996*	*2·9*	*73,320*	*2·7*	*128,167*	*3·9*
Clerical	21,029[10]	1·5[10]	46,220	3·0	72,595	3·1	127,325[11]	4·8[11]	141,191	4·3
Labourers	115,546	8·2	126,726	8·2	317,008	13·4	306,211	11·4	425,408	13·0
All Occupations[12]	**1,412,386**	**100·0**	**1,544,883**	**100·0**	**2,358,813**	**100·0**	**2,683,019**	**100·0**	**3,261,371**	**100·0**

For footnotes, see end of table, p. 778.

1.—Numbers and Percentages of the Gainfully Occupied, 10 Years of Age or Over, Classified According to Sex, in each Occupational Group, by Economic Areas, 1891-1931—concluded.

Occupational Group.	1891.		1901.		1911.		1921.		1931.	
	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.	No.	p.c.
FEMALES.										
Maritime Provinces.										
Agriculture	3,416	8·4	2,967	8·3	3,027	6·8	2,934	5·6	2,849	5·2
Manufacturing	9,785	24·2	7,256	20·3	9,244	20·6	5,853	11·1	4,989	9·2
Transportation	165	0·4	1,416[8]	4·0[8]	454	1·0	1,261	2·4	1,475	2·7
Trade and finance	1,145	2·8			3,309	7·4	5,657	10·7	5,022	9·2
Service	25,321	62·6	22,923	64·1	26,142	58·3	29,670	56·3	32,961	60·6
Professional	*4,446*	*11·0*	[9]	[9]	*6,842*	*15·3*	*9,943*	*18·9*	*10,772*	*19·8*
Personal	*20,726*	*51·2*	*17,672*	*49·4*	*19,111*	*42·6*	*19,691*	*37·4*	*22,132*	*40·7*
Clerical	328[10]	0·8[10]	1,172	3·3	2,551	5·7	7,181	13·6	6,926	12·7
All Occupations[12]	**40,465**	**100·0**	**35,749**	**100·0**	**44,811**	**100·0**	**52,697**	**100·0**	**54,356**	**100·0**
Quebec.										
Agriculture	2,766	4·7	1,540	2·0	3,017	3·0	3,620	2·6	4,633	2·3
Manufacturing	17,748	30·3	27,115	35·1	34,188	33·8	37,633	27·0	45,396	22·4
Transportation	262	0·4	2,132[8]	2·8[8]	1,197	1·2	3,349	2·4	4,553	2·2
Trade and finance	1,953	3·3			6,934	6·9	10,322	7·4	14,597	7·2
Service	34,592	59·1	42,507	55·0	49,935	49·4	65,135	46·8	104,764	51·8
Professional	*10,643*	*18·2*	[9]	[9]	*12,942*	*12·8*	*29,847*	*21·4*	*36,077*	*17·8*
Personal	*23,804*	*40·7*	*26,235*	*34·0*	*36,731*	*36·3*	*35,038*	*25·2*	*68,525*	*33·9*
Clerical	628[10]	1·1[10]	2,841	3·7	5,776	5·7	18,055	13·0	27,887	13·8
All Occupations[12]	**58,533**	**100·0**	**77,245**	**100·0**	**101,101**	**100·0**	**139,151**	**100·0**	**202,422**	**100·0**
Ontario.										
Agriculture	5,512	5·8	3,898	3·6	5,690	3·7	5,370	2·8	6,690	2·7
Manufacturing	32,241	33·7	33,763	31·1	45,515	29·4	40,089	20·5	42,406	17·0
Transportation	523	0·5	5,026[8]	4·6[8]	2,428	1·6	6,743	3·5	7,449	3·0
Trade and finance	3,649	3·8			13,953	9·0	21,381	11·0	22,905	9·2
Service	51,130	53·5	58,271	53·6	69,600	44·9	76,974	39·5	114,889	46·0
Professional	*9,016*	*9·4*	[9]	[9]	*17,066*	*11·0*	*30,991*	*15·9*	*38,648*	*15·5*
Personal	*41,664*	*43·6*	*47,221*	*43·5*	*52,070*	*33·6*	*45,551*	*23·3*	*75,992*	*30·5*
Clerical	2,015[10]	2·1[10]	7,604	7·0	17,442	11·3	43,709	22·4	54,409	21·8
All Occupations[12]	**95,612**	**100·0**	**108,625**	**100·0**	**154,878**	**100·0**	**195,106**	**100·0**	**249,488**	**100·0**
Prairie Provinces.										
Agriculture	410	7·5	436	3·8	3,748	7·9	5,216	6·7	8,478	7·3
Manufacturing	909	16·6	1,488	12·9	4,639	9·8	4,226	5·4	5,042	4·4
Transportation	22	0·4	254[8]	2·2[8]	928	2·0	2,247	2·9	2,538	2·2
Trade and finance	123	2·2			3,212	6·8	7,366	9·5	8,911	7·7
Service	3,890	71·0	8,753	75·7	29,038	61·3	42,442	54·6	70,981	61·3
Professional	*720*	*13·1*	[9]	[9]	*6,452*	*13·6*	*16,589*	*21·4*	*23,774*	*20·5*
Personal	*3,132*	*57·2*	*6,758*	*58·4*	*22,366*	*47·2*	*25,679*	*33·1*	*47,025*	*40·6*
Clerical	81[10]	1·5[10]	625	5·4	5,758	12·1	16,062	20·7	19,595	16·9
All Occupations[12]	**5,476**	**100·0**	**11,568**	**100·0**	**47,404**	**100·0**	**77,683**	**100·0**	**115,845**	**100·0**
British Columbia.										
Agriculture	90	2·9	95	2·0	405	2·4	743	2·9	1,429	3·3
Manufacturing	1,428	45·5	951	20·0	3,209	19·3	2,067	8·1	3,266	7·5
Transportation	12	0·4	251[8]	5·3[8]	333	2·0	1,275	5·0	1,932	4·4
Trade and finance	64	2·0			1,243	7·5	3,002	11·8	5,017	11·5
Service	1,431	45·6	3,128	65·7	9,126	54·9	12,735	49·9	23,305	53·3
Professional	*267*	*8·5*	[9]	[9]	*2,100*	*12·6*	*5,384*	*21·1*	*7,948*	*18·2*
Personal	*1,152*	*36·7*	*2,420*	*50·8*	*6,943*	*41·8*	*7,242*	*28·4*	*15,188*	*34·7*
Clerical	40[10]	1·3[10]	327	6·9	2,229	13·4	5,605	22·0	8,681	19·8
All Occupations[12]	**3,136**	**100·0**	**4,762**	**100·0**	**16,627**	**100·0**	**25,513**	**100·0**	**43,748**	**100·0**
Canada.										
Agriculture	12,194	6·0	8,936	3·8	15,887	4·4	17,883	3·6	24,079	3·6
Manufacturing	62,111	30·6	70,508	29·6	96,795	26·5	89,868	18·3	101,099	15·2
Transportation	984	0·5	1,322	0·6	5,340	1·5	14,875	3·0	17,947	2·7
Trade and finance	6,934	3·4	7,757	3·3	28,651	7·9	47,728	9·7	56,452	8·5
Service	116,364	57·3	135,582	57·0	183,841	50·4	226,956	46·3	346,900	52·1
Professional	*25,092*	*12·3*	*34,679*	*14·6*	*45,402*	*12·4*	*92,754*	*18·9*	*117,219*	*17·6*
Personal	*90,478*	*44·5*	*100,306*	*42·2*	*137,221*	*37·6*	*133,201*	*27·2*	*228,862*	*34·4*
Clerical	3,092[10]	1·5[10]	12,569	5·3	33,756	9·3	90,612	18·5	117,498	17·6
All Occupations[12]	**203,222**	**100·0**	**237,949**	**100·0**	**364,821**	**100·0**	**490,150**	**100·0**	**665,859**	**100·0**

---

[1] Includes all farmers' sons, 14 years or over, whether or not reported with gainful occupations. [2] Does not include nomadic Indians. [3] Does not include Indians. [4] Includes pulp-mill employees. [5] Does not include Indians living on reserves. [6] Includes almost all mine and smelter employees, except clerical workers. [7] Separate figures for "Manufacturing" and "Construction" not available by economic areas for 1901. [8] Separate figures for "Transportation" and "Trade and finance" not available by economic areas for 1901. [9] Figures for "Professional" not available by economic areas for 1901. [10] Clerical workers in government service were included with "Service". [11] Includes proof-readers, shippers, weighmen, and postmen, classified elsewhere in other years. The addition of these persons to the 1931 figures would have added 18·0 p.c. to the number of males in this occupation group. [12] Includes "Other and unspecified".

Section 2.—The Dominion Department of Labour.

The Department of Labour of the Dominion Government was established in 1900 under the authority of the Conciliation Act. At the outset its chief duties comprised the administration of certain provisions of this statute which were designed to aid in the prevention and settlement of labour disputes, the administration of the Government's fair wages policy for the protection of workmen employed on Dominion Government contracts and on works aided by grants of public funds, the collection and classification of statistical and other information relative to conditions of labour, and the publication of a monthly periodical known as the *Labour Gazette*. From 1900 to 1909 the Department was administered by the Postmaster General, who was also Minister of Labour. It was constituted a separate Department under the Labour Department Act, 1909.

The work of the Department was greatly increased in 1907 by the passage of the Industrial Disputes Investigation Act. At present the Department is also charged with the administration of an Act passed in 1918 known as the Employment Offices Co-ordination Act, with the Government Annuities Act of 1908, the Technical Education Act of 1919, the White Phosphorous Matches Act of 1914, the Fair Wages and Hours of Labour Act of 1935, the Vocational Education Act of 1931, the Combines Investigation Act of 1923 as amended in 1935 and 1937, and the Dominion relief legislation. The work of the Department has developed in other directions, especially in the collection and publication of information as to industrial disputes, wages, industrial agreements, prices, industrial accidents, labour legislation, and labour organization; also in connection with the International Labour Organization of the League of Nations. For the operation of the Government Annuities Act and the Technical Education Act, see the chapters on Insurance and Education, respectively.

Industrial Disputes Investigation Act.—The Industrial Disputes Investigation Act (R.S.C., 1927, c. 112) has attracted considerable favourable attention from legislators and publicists throughout the world. As enacted in 1907, it forbids strikes and lockouts in mines and certain public utility industries until the matters in dispute have been dealt with by a board of conciliation and investigation consisting of three members, two appointed by the Minister of Labour on the recommendation of the respective parties to the dispute, the third on the recommendation of the first two, or, if they fail to agree, by the Minister himself. Should either of the parties fail to nominate a board member, the Minister may appoint a fit person on its behalf. After such a board has made its report, either of the parties to the dispute may reject its findings and declare a strike or a lockout, a course which has been adopted, however, only in a small percentage of cases. The machinery of the Act may be extended to other industries with the consent of the parties concerned.

In January, 1925, a judgment was rendered by the Judicial Committee of the Privy Council declaring that the Act as it stood was not within the competence of the Dominion Parliament.* At the ensuing session of Parliament amendments were made to the statute with the object of limiting its operation to matters not within exclusive provincial jurisdiction. It was also provided by these amendments that the statute should apply in the case of "any dispute which is within the exclusive legislative jurisdiction of any province and which by the legislation of the province is made subject to the provisions of this Act". The legislatures of all provinces except Prince Edward Island took advantage of this provision and enacted enabling legislation by which the Dominion Industrial Disputes Investigation Act became operative in respect of disputes of the classes named in the Dominion law and otherwise within exclusive provincial jurisdiction. In December, 1937, however, a statute entitled the Industrial Conciliation and Arbitration Act was passed by the British Columbia Legislature providing provincial machinery for dealing with industrial disputes within the legislative jurisdiction of the province and repealing the Industrial Disputes Investigation (British Columbia) Act.

---

* See p. 241 of the *Labour Gazette* for February, 1925, for text of judgment of the Judicial Committee of the Privy Council in regard to the validity of this statute.

A review of the proceedings under the Industrial Disputes Investigation Act from its enactment in March, 1907, to Mar. 31, 1938, shows that, during the 31 years, 895 applications were received for the establishment of boards of conciliation and investigation, as a result of which 574 boards were established. In all but 39 cases, strikes or lockouts were averted or ended.

Fair Wages Policy.—The Fair Wages Branch of the Department of Labour is charged with the preparation and enforcement of the labour conditions and schedules of minimum wage rates which are inserted in Dominion Government contracts for works of construction, remodelling, repair or demolition. The number of fair wages schedules prepared, from the time the Fair Wages Policy was adopted by the Dominion Government in 1900 up to the end of the fiscal year 1937-38, was 8,220. The number of fair wages schedules furnished during the fiscal year 1937-38 was 703.

The Department of Labour also co-operates closely with other departments of the Government in ensuring the observance of the fair wages conditions inserted in contracts for the manufacture of various classes of equipment and supplies for Government use, and is frequently consulted by other departments regarding the prevailing rates of wages to be observed on works carried out by day labour.

The Fair Wages Policy of the Government of Canada was originally based on a resolution adopted by the House of Commons in 1900. It was later expressed in an Order in Council adopted on June 7, 1922, amended on Apr. 9, 1924, and again on Dec. 31, 1934. Under these Orders in Council certain specified conditions were designated as being applicable to contracts for building and construction operations, and other conditions as being applicable in the case of contracts for the manufacture of certain classes of Government equipment and supplies. The policy required that the current wage rates and working hours of the district should be observed in the case of all workmen employed, or, if there were no current rates or hours in existence, that fair and reasonable conditions should be observed in both respects. Contracts for railway construction to which the Dominion Government has granted financial aid, either by way of subsidy or guarantee, are likewise subject to fair wages conditions. The policy has, moreover, been extended within recent years to cover contracts for works carried out by the several Harbour Commissions and by the National Harbours Board which replaced them.

On May 30, 1930, an Act of Parliament was adopted known as the Fair Wages and Eight Hour Day Act, 1930, providing for the payment of current wage rates to all persons employed on contracts made with the Government of Canada for works of construction, remodelling, repair, or demolition, provided that the wages in all cases should be fair and reasonable. This statute also directed that the working hours of persons while so employed should not exceed eight hours a day. It was further declared that the foregoing conditions were to be applied to all workmen employed by the Government itself on the construction, remodelling, repair, or demolition of any work.

The Fair Wages and Eight Hour Day Act, 1930, was superseded, however, on May 1, 1936, by the Fair Wages and Hours of Labour Act, 1935, which was adopted by Parliament on June 28, 1935. This latter statute re-enacts a number of the sections of the former Act and adds new provisions to comply with the recommendations of the Royal Commission on Price Spreads. Like its predecessor, the Act makes provision for fair wages and an eight-hour day on Government contracts for works of construction, remodelling, repair, or demolition, imposing, however, a limit of forty-four hours a week on such works and extending the Dominion Government's policy of fair wages and an eight-hour day to works carried out by any provincial or municipal authority with the aid of Dominion Government funds, as well as to other works aided by the Government of Canada.

The Act sets out that the term "fair wages" means such wages as are generally accepted as current for competent workmen in the district in which the work is being performed for the character or class of work in which such workmen are respectively engaged; but shall in all cases be such wages as are fair and reasonable.

The benefits of the Fair Wages Policy apply also to workmen employed by Government departments on a day-labour basis in building and construction works.

On Mar. 27, 1930, an Order in Council was passed providing that, except in cases where the work of employees was intermittent in character, or the application of the rule was not deemed to be practicable, or in the public interest, the hours of work of any Dominion Government employees who had up to that time been required to work more than eight hours daily should be reduced to eight hours a day, with a half-holiday on Saturdays.

An Order in Council was adopted on Dec. 31, 1934, rescinding the labour conditions previously applied to contracts for the manufacture of various classes of Government supplies, and substituting other conditions therefor. The provision for the payment of wages not less than current rates, or fair and reasonable rates if there are no current rates, is retained in the new conditions, but with the added proviso that in no event shall the wage rate for male workers 18 years of age or over be less than 30 cents an hour, and for female workers 18 years of age or over, 20 cents an hour. It is also declared that males and females under 18 years of age shall be entitled to rates of wages not less than those provided for women and girls in the minimum wage scales of the respective provinces, and that, in any cases where the provincial minimum wage laws require the payment of higher wages than those set out above, such higher rates shall apply in the execution of Dominion contract work.

Owing to the large and increasing number of contracts which are being placed by the Dominion Government for the manufacture and overhaul of aircraft, for the manufacture of munitions, and for the construction and repair of boats of various types, it is now the policy of the Government to insert in such contracts schedules which have been drawn up in consultation between the Department of Labour and the other Government departments concerned, setting forth the minimum rates of wages and the maximum hours to be observed in the execution of the respective undertakings throughout the country. The Department of Labour co-operates closely with the Government departments concerned in ensuring that the contract conditions are strictly enforced.

Labour Gazette.*—Since the establishment of the Department of Labour in 1900, a monthly publication known as the *Labour Gazette* has been issued. From its inception the *Labour Gazette* has maintained a continuous record of industrial, social, and economic conditions in Canada, as reflected in legislation, employment and unemployment, price trends, labour disputes, conventions and recommendations of labour organizations, and industrial relations programs. One of the particular functions of the Department is the promotion of industrial harmony, and prominence is therefore given in the *Labour Gazette* to proceedings under the Industrial Disputes Investigation Act and the Conciliation and Labour Act. Complete information is also given with respect to proceedings under other measures administered by the Department, including the Employment Offices Co-ordination Act, the Combines Investigation Act, the Technical Education Act, the Government Annuities Act, the unemployment relief legislation, and the Fair Wages and Eight Hour Day Act.

---

* A charge of 20 cents per annum is made for this publication to subscribers in Canada, the United States of America, and Mexico, and of $1 per annum to subscribers in all other countries.

Included in the statistical information published is a monthly analysis of prices, wholesale and retail, in Canada, indicating trends in the cost of living and showing the prices of staple articles, together with index numbers of price movements over a series of years. Financial and statistical summaries of pensions for the aged and blind in Canada are also published at regular intervals. A special section records the work of the International Labour Organization (League of Nations), the draft conventions and recommendations adopted by that body being published in full.

The *Labour Gazette* is widely distributed throughout Canada, and the statistical and other information contained therein is constantly used in connection with the discussion of wages and other issues between employers and workers.

Labour Legislation.—The Department gives considerable attention to labour legislation in Canada and abroad. Notes and articles are published in the *Labour Gazette* and special bulletins in printed or mimeographed form are issued from time to time. While each of these deals with some particular phase of labour legislation in the Dominion or in some of the provinces, information is usually given concerning legislation on the same subject in other countries.

Since 1917, the Department has published a series of reports on labour legislation in Canada. Four reports reproduced the text or a summary of all the labour legislation in force at the end of each of the years 1915, 1920, 1928, and 1937, respectively. The reports for other years relate only to the laws enacted during each respective year.

Section 3.—Provincial Labour Departments and Bureaus.

The rapid industrial development at the end of the nineteenth century in Quebec and Ontario, the leading manufacturing provinces, brought with it the recognition of the need of special provincial offices to safeguard the interests of labour, with the result that the Ontario Bureau of Labour was established in 1900 and the Quebec Department of Public Works and Labour in 1905. In 1904, an Act was passed in New Brunswick providing for a Bureau of Labour, but this never became operative. Some years later, to cope with conditions created by the growth of industry in the West, Acts were passed providing for the creation of Provincial Bureaus of Labour in Manitoba (1915), in Saskatchewan (1920), and in Alberta (1922), while a Department of Labour was established in British Columbia in 1917. A Department of Labour was established in Nova Scotia by c. 3 of the Statutes of 1932, and the Manitoba Bureau of Labour became a Department in 1934. All these authorities publish annual reports on their activities.

The Nova Scotia Department of Labour.—The Act establishing the Nova Scotia Department of Labour provides that: the Department of Labour shall take cognizance of all matters relating to labour, and shall administer such affairs, matters, Acts and regulations as the Governor in Council from time to time assigns to that Department, whether or not they have been assigned or have belonged, by or under any Act of the Legislature of Nova Scotia or otherwise, to some other department or to some member of the Executive Council.

The Department is in charge of a Minister of Labour, who has under him a Deputy Minister of Labour. The latter is empowered to collect and publish information and statistics affecting labour, and to administer such Acts as may be assigned to the Department by Order in Council. At present, labour bureaus in the province, the administration of the Factories Act, Minimum Wage Board, Limitation of Hours Board, Industrial Standards Act, Trade Union Act as affects check-off, and unemployment relief have been assigned by Order in Council to the Department of Labour.

The Quebec Department of Labour.—This Department was formerly known as the Department of Public Works and Labour, each division having a separate Deputy Minister, but in 1931 each division was recognized as a distinct department.

The duties of the Department of Labour include the institution and control of inquiries into important industrial questions and it may collect useful facts and statistics relating thereto, to be transmitted to the Quebec Bureau of Statistics. The Department is charged with the administration of provincial Acts respecting industrial and commercial establishments, trade disputes, and the maintenance of fair wages clauses in Provincial Government contracts. The Quebec Workmen's Compensation Commission is under its jurisdiction, together with the Provincial Employment Service.

The Department is responsible for the licensing and qualification of electricians, moving-picture machine operators, stationary and portable machine enginemen, and pipe mechanics; it is also charged with the inspection of electrical installations, heating installations, steam, hot-water and hot-air furnaces, boilers registered under the Interprovincial Code, together with the registering of blue-prints in connection with the construction of boilers. A special branch of the Department is entrusted with the inspection of public buildings and the approval of the plans of new buildings.

The Department, since the 1934 session, was charged with the enforcement of the Collective Labour Agreements Act which has been considerably modified during subsequent sessions. It is not the duty of the Government to lead employers and employees into the preparation of agreements, but when a collective labour agreement has been passed and adopted by the Lieutenant-Governor in Council, a joint committee, being and having the rights of an independent corporation, is formed to supervise the enforcement of the decree. The joint committee, under the authority of the Act, may adopt regulations for its own administration, render obligatory the certificate of competency in a given trade in cities of more than 5,000 population, and collect an assessment, not exceeding one-half of one per cent, on the payrolls of employers and on the wages of employees for the purposes of the putting into force of the decree. During the fiscal year 1937-38, 74 decrees were in force in the province in various industries.

In order to supply the needs of unorganized trades wherein collective labour agreements could not be entered into, the Fair Wage Act was adopted in 1937. The Fair Wage Board, created under its authority, is a permanent arbitration tribunal having the powers and rights of a corporation. It may determine, even on its own initiative, for the periods of time fixed by it, for the territories it may designate, and for any category of employees it may indicate, fair wages, working hours, and, in general, deal with any matter pertaining to employment. However, this Act does not affect collective labour agreements in force or which may become compulsory thereafter. It replaces the former Women's Minimum Wage Act so far as the welfare of women is concerned.

The 1937 session gave fresh life to the Old Age Pension Act adopted in 1936 in line with Dominion Old Age Pension legislation; a commission was formed to supervise the carrying out of this Act and since September, 1936, it has been placed under the jurisdiction of the Department of Labour.

An Act respecting the welfare of youth authorizes the Lieutenant-Governor in Council to prohibit work by boys and girls under 16 years of age in industrial or commercial establishments designated by him and, with respect to such dangerous work as he may designate, the employment of boys and girls of less than 18 years of age.

Allowances to needy mothers will be granted in virtue of an Act to provide such assistance. The Old Age Pension Commission, which is entrusted with the carrying out of this social legislation, is also the organization supervising the enforcement of the Blind Persons Aid Act. Blind men and women over 40 years old are now in receipt of an allowance.

The Department has jurisdiction over the limitation of hours of work; since the coming into force of the enabling Act, hours of labour in the building trades have been limited to 44 and 48 per week throughout the province.

Since September, 1936, the Department of Labour has been charged with the control of unemployment relief in the province; such service was formerly under the jurisdiction of the Department of Public Works.

The Department issues qualification certificates to workmen charged with the use and handling of explosives and is responsible for the enforcement of the Scaffolding Inspection Act in towns where there is no municipal enforcement.

The Department of Labour of Ontario.—The Department of Labour of Ontario was established in 1919 and placed under the direction of a Minister and a Deputy Minister of Labour. This Department had its origin in the Bureau of Industries formed in 1882 under the Department of Agriculture, to collect and publish statistics relating to the industries of the province and (later) to administer the first Factory Act of 1886. In 1900 a Bureau of Labour, attached to the Department of Public Works, was authorized to collect and publish information relating to employment, wages and hours, strikes, labour organizations, and general conditions of labour. Several investigations were made regarding such matters and the first free employment offices were opened by the Bureau of Labour. In 1916 this Bureau was in turn superseded by the Trades and Labour Branch, also under the Ministry of Public Works but administered by a Superintendent. The establishment of the Branch had been recommended by the Ontario Commission on Unemployment and the expansion of the work undertaken by the Branch, and the increase in the demands made upon its resources led to the creation of a special Department of the Government by the Department of Labour Act, 1919.

The Department of Labour administers the following Acts: the Department of Labour Act; the Factory, Shop and Office Building Act; the Steam Boiler Act; the Operating Engineers Act; the Building Trades Protection Act; the Employment Agencies Act; the Apprenticeship Act; the Regulations respecting the Protection of Persons Working in Compressed Air; the Regulations respecting the Protection of Persons Working in Tunnels and Open Caissons, Coffer Dams, and Crib Work; the Minimum Wage Act, 1937; the Industrial Standards Act; the One Day's Rest in Seven Act; the Government Contracts Hours and Wages Act; and the Workmen's Compensation Act.

The Minimum Wage Act, 1937, revises the former Minimum Wage Act as it applies to female workers and extends the scope of the Act to include male employees. Pursuant to an amendment to the Department of Labour Act, the Industry and Labour Board was established in 1937. It consists of three members, one of whom is chairman and all of whom are officers of the Department of Labour. One member is a woman. The Board has power to administer the provisions of any Act assigned to it, and the Minimum Wage Act, 1937, the Apprenticeship Act, and the Industrial Standards Act have been assigned for administrative purposes.

The Department is required to maintain employment offices, to collect information respecting employment, sanitary and other conditions in work places, wages and hours of work, and to study labour legislation in other parts of the British Empire and in foreign countries, as well as any suggested changes in the labour laws of Ontario. The representatives of the Department of Labour have right of access to offices, factories, and other work places at any reasonable hour, and may be authorized to hold inquiries under the Public Inquiries Act. The Department publishes annual reports which cover the work of the officers employed in the administration of the various Acts assigned to it.

The Manitoba Department of Labour.—The Act of 1915, establishing the Manitoba Bureau of Labour, provided that it be attached to the Department of Public Works; an amendment of 1922, however, provided for its attachment to any other Department as the Lieutenant-Governor in Council may determine. The Bureau was created a separate Department by c. 28 of the Statutes of Manitoba, 1931, but the Act was not proclaimed until July 6, 1934.

The Department is charged with the administration of the following Acts: the Bureau of Labour Act; the Manitoba Factories Act; the Bake Shop Act; the Shops Regulation Act; the Minimum Wage Act; the Elevator and Hoist Act; the Steam Boiler Act; the Building Trades Protection Act; the Public Buildings Act; the Fair Wage Act; the Electricians' Licence Act; the Amusements Act (Secs. 11 to 15); the One Day's Rest in Seven Act; the Employment Bureau Act; the Strikes and Lockouts Prevention Act.

The Bureau of Labour and Fires Prevention Branch is a sub-department of the Department of Labour (formerly a sub-department of the Department of Public Works). The Bureau also enforces the Fires Prevention Act.

The Saskatchewan Bureau of Labour and Public Welfare.—This Bureau was created by an Act of 1934. It is administered by the Minister of Municipal Affairs, assisted by a permanent Commissioner. The function of the Bureau is to administer the following Acts: the Factories Act; the Building Trades Protection Act; the Employment Agencies Act; the One Day's Rest in Seven Act; the Weekly Half-Holiday Act; the Minimum Wage Act; the Workmen's Wage Act; the Trade Union Associations Act; and the Industrial Standards Act. It is also charged with the operation of public free employment offices; the collection and publication of information and statistics relating to employment; wages and hours of labour throughout the province; strikes and other labour difficulties; trade unions and labour organizations; the relations between capital and labour, and other subjects connected with industrial problems; the commercial, industrial, and sanitary conditions of employment.

The Alberta Department of Trade and Industry.—This Department exercises the powers and functions conferred upon it by the Department of Trade and Industry Act, and in addition supervises the administration of the following Acts: the Minimum Wage Act, 1925, relating to the wages of women workers; the Male Minimum Wage Act; the Industrial Standards Act; the Alberta Trades Disputes Act; the Factories Act; the Theatres Act; the Trade Schools Act; the Licensing of Trades and Businesses Act, 1937; and the Qualification of Tradesmen Act. The Department of Health has the administration of the Alberta Employment Offices Act as well as measures for unemployment relief.

The British Columbia Department of Labour.—This Department was instituted by an Act of 1917, under a Minister and Deputy Minister of Labour. It administers the laws of British Columbia affecting labour, and is empowered to collect information respecting industries, wages, employment, prices, labour organizations, and other data pertaining to labour problems. Prominent among the Acts administered by the Department are: the Male Minimum Wage Act, 1934; the Female Minimum Wage Act, 1934; the Hours of Work Act, 1934. These are administered by the Board of Industrial Relations, the Deputy Minister of Labour being Chairman of the Board. Other activities of the Department include the administration of: the Semi-monthly Payment of Wages Act; the Factories Act; the Apprenticeship Act; the Trade-Schools Regulation Act; the Industrial Conciliation and Arbitration Act, 1937; and the operation of employment bureaus within the province.

Section 4.—Canada and the International Labour Organization.*

The International Labour Organization of the League of Nations was set up in 1919 in accordance with Part XIII of the Treaties of Peace to promote the improvement of industrial conditions by legislative action and international agreement.

The Organization comprises the International Labour Conference, which meets annually and is composed of four representatives of each Member State, two of whom are Government delegates, while two represent employers and workers, respectively, and the International Labour Office in Geneva, which functions as a secretariat of the annual conference and also collects and publishes information on subjects relating to industrial life and labour. The Office is under the control of a Governing Body, consisting of 32 persons, appointed by the International Labour Conference, of whom 16 represent governments, 8 represent employers and 8 represent workers. In addition to its control of the Labour Office, the Governing Body is charged with the preparation of the agenda of the annual conference.

Under the terms of the Peace Treaties, 8 of the government seats on the Governing Body are held by the countries of "chief industrial importance". Canada has been designated as one of these 8 states of chief industrial importance. There are at present 57 countries comprised in the membership of the International Labour Organization, including nearly all of the industrial states of the world. Germany ceased to be a member of the Organization in October, 1935, and the withdrawal of Italy and of Japan will become effective in December, 1939, and November, 1940, respectively. The United States of America, although not a member of the League of Nations, joined the International Labour Organization in 1935, as did also Russia.

---

* On this subject see also the 1921 Year Book, pp. 607-609; the 1922-23 Year Book, pp. 704-707; and the 1924 Year Book, pp. 666-670.

Mr. H. Hume Wrong, the Permanent Delegate of Canada to the League of Nations, Geneva, represents the Government of Canada at the meetings of the Governing Body of the International Labour Office. At the triennial election of the Governing Body in 1937, Mr. P. M. Draper, the President of the Trades and Labour Congress of Canada, was elected as a deputy member of the workers' representatives on this body.

The conclusions of the International Labour Conference are cast in the form of draft conventions or recommendations, addressed to the national governments which comprise the membership of the International Labour Organization. A two-thirds majority of the Conference is required for the adoption of either a draft convention or a recommendation. Under the terms of the Treaties of Peace, the Member States are bound to bring the draft convention or recommendations before the authority or authorities within whose competence the subject matter lies, for the enactment of legislation or other action. Thus the findings of the Conference become binding on the various countries concerned only if and when action regarding them is taken by the latter.

The Dominion Department of Labour is entrusted with the duties arising out of the relations of Canada with the International Labour Organization. These have entailed much correspondence, not only with the International Labour Organization, but also with the different departments of the Dominion Government, with the provinces, and with employers' and workers' organizations. Replies have also been prepared in the Department of Labour to various questionnaires issued by the International Labour Office. Performance of these duties has necessitated a close study of the different technical questions which have figured on the agenda of the various conferences and at the meetings of the Governing Body.

Twenty-four sessions of the International Labour Conference have been held since its inception in 1919. Sixty-three draft conventions and 56 recommendations have been adopted at these annual gatherings. The draft conventions and recommendations of the Conference have, among other subjects, related to the following: hours of labour; measures for the avoidance of unemployment; employment conditions of women and children; employment conditions of seamen; employment in agriculture; weekly rest; statistics of immigration and emigration; principles of factory inspection; inspection of emigrants on board ship; workmen's compensation for accidents and occupational diseases; social insurance; minimum wages; prevention of accidents to dockers; forced labour; holidays with pay; and regulation of hours of work of salaried employees and of workers in mines, manufacturing industries, and agriculture.

Up to December, 1938, 810 ratifications of these conventions had been registered with the League of Nations, of which 11 were conditional or with delayed application; 48 had been approved by the competent national authority; and 136 had been recommended to the competent national authority for approval.

Canadian Action on Draft Conventions and Recommendations.—Nine draft conventions in all have been ratified by the Dominion, namely, those relating to: (1) minimum age for employment of children at sea; (2) unemployment indemnity for seamen in case of the loss or foundering of a ship; (3) minimum age for employment as trimmers and stokers; (4) medical examination of children and young persons employed at sea; (5) seamen's articles of agreement; (6) marking of the weight on heavy packages transported by vessels; (7) limitation of hours of work in industrial undertakings to eight in the day and forty-eight in the week; (8) weekly rest in industrial undertakings; and (9) creation of minimum wage-fixing machinery. The first four of these conventions were ratified in March, 1926, following the adoption of legislation by Parliament to give effect to the proposals which were respectively involved. The next two were ratified in June, 1938, legislation to implement them having been embodied in the Canada Shipping Act, 1934. The last three conventions were ratified in March, 1935, following the adoption of legislation by Parliament on these respective subject matters, *i.e.*, hours of labour, weekly rest, and minimum wages. Doubts having arisen as to the legal competence of the Dominion Parliament to deal with these matters, a reference was submitted to the Supreme Court of Canada, which was later carried in appeal to the Judicial Committee of the Privy Council. The judgments of the latter body, given in January, 1937, were to the effect that all three of these statutes were *ultra vires* of the Parliament of Canada.

At the 1935 session of Parliament a resolution was also adopted approving of another draft convention of the International Labour Conference with a view to its subsequent ratification, namely, that relating to safety of workers engaged in loading and unloading ships. This convention, however, has not been ratified to date.

Section 5.—Organized Labour in Canada.

The Dominion Department of Labour publishes annually a report on labour organization in Canada. This report outlines the composition and development of the various organizations of wage-earners in the Dominion and gives statistical and other information respecting membership, benefits, registration of trade unions, etc.

Total Reported Membership of Organized Labour in Canada.—The numerical strength of organized labour in Canada at the close of 1937 was given by the Department of Labour as follows: international organizations, 2,048 local branches, with an aggregate membership of 217,465; Canadian central labour bodies, 853 branches and 98,633 members; independent units, 72 branches and 16,521 members; National Catholic unions, 285 branches and 52,000 members; grand total, 3,258 local branches and 384,619 members. As compared with 1936, this represents an increase of 372 branches and 62,146 members. Table 2 shows the total membership of trade unions in Canada for each year since 1911.

2.—Membership of Trade Unions in Canada, 1911-37.

Year.	Members.	Year.	Members.	Year.	Members.
1911	133,132	1920	373,842	1929	319,476
1912	160,120	1921	313,320	1930	322,429
1913	175,799	1922	276,621	1931	310,544
1914	166,163	1923	278,092	1932	283,576
1915	143,343	1924	260,643	1933	286,220
1916	160,407	1925	271,064	1934	281,774
1917	204,630	1926	274,604	1935	280,704
1918	248,887	1927	290,282	1936	322,473
1919	378,047	1928	300,602	1937	384,619

Main Groups.—The following paragraphs outline the main groups into which Canadian labour organizations now fall.

Trades and Labour Congress of Canada.—The Trades and Labour Congress is representative of the international trade union movement in the Dominion, the bulk of its membership being drawn from the international organizations which have local branches in Canada. The Congress reported an affiliated membership of 191,147. Of the 1,828 local unions reported to be in affiliation with the Congress, 1,622 made returns, showing a combined membership of 204,966. An audit was made of the membership of the Congress and revealed a paid-up membership of 145,966, as at Dec. 31, 1937. It is generally maintained that the percentage of membership in arrears usually runs to a considerable figure, in some instances as high as 25 p.c. This would appear to be borne out by the aforementioned audit.

All-Canadian Congress of Labour.—The All-Canadian Congress of Labour was organized in Montreal, Mar. 16, 1927, by representatives of national and independent organizations. As at Dec. 31, 1937, the Congress reported an affiliated membership of 28,048. Of the 267 local unions reported to be in affiliation with the Congress, 240 made returns, showing a combined membership of 22,542. The audit of the membership figures revealed a paid-up membership of 19,335.

Canadian Federation of Labour.—Following a disagreement among the executive of the All-Canadian Congress of Labour prior to the scheduled convention of that body in September, 1936, a new organization was formed under the name of Canadian Federation of Labour. (This was the name of a national organization formed in 1902 but merged with the All-Canadian Congress of Labour when that body was formed in 1927.) At the close of 1937, the Federation reported an affiliated membership of 52,622. Of the 72 local unions reported to be in affiliation with the Federation, 39 made returns showing a combined membership of 8,704. It is not possible to give audited figures of paid-up members for the Canadian Federation of Labour.

Federation of Catholic Workers of Canada.—In 1918 a conference of National Catholic Unions, which were first established in 1901, was held in Quebec city, followed by other meetings in Three Rivers in 1919 and in Chicoutimi in 1920. The delegates at the latter conference, numbering 225 and representing 120 unions, decided to establish a permanent central body to co-ordinate the work of the scattered units. Accordingly at the 1921 conference held in Hull, at which approximately 200 delegates representing 89 unions were present, a constitution to govern the new body was approved. The name selected was "Federation of Catholic Workers of Canada", and permanent officers were elected, the constitution and by-laws becoming effective on Jan. 1, 1922. For 1937, the Federation reported an affiliated membership of 52,000. Of the 285 local unions reported to be in affiliation with the Federation, 166 made returns showing a combined membership of 36,801. It is not possible to give audited figures of paid-up membership for the Federation of Catholic Workers of Canada.

International Trade Unions Operating in Canada.—Table 3 gives the names of the 96 international labour organizations which now carry on operations in Canada and also shows the number of branches which were in existence in the Dominion at the close of 1937 and the reported total membership in Canada of each organization. For details regarding affiliations the reader is referred to the Twenty-Seventh Annual Report on Labour Organization, compiled and published by the Dominion Department of Labour, which may be obtained from the King's Printer, Ottawa, at a price of 50 cents per copy.

3.—International Trade Unions Operating in Canada, showing Individual Numbers of Branches and Memberships, as at Dec. 31, 1937.

International Organization.	Branches.	Membership Reported.
	No.	No.
Actors, American Federation of	[1]	1
American Federation of Labor	12	378
Airline Pilots' Association, International	[1]	2
Asbestos Workers, International Association of Heat and Frost Insulators and	1	6
Automobile Workers of America, International Union of United	7	10,000
Bakery and Confectionery Workers' International Union of America	14	912
Barbers' International Union of America, Journeymen	25	800
Bill Posters and Billers of America, International Alliance of	1	10
Blacksmiths, Drop Forgers and Helpers, International Brotherhood of	17	850
Boilermakers, Iron Shipbuilders, and Helpers of America, International Brotherhood of	38	2,201
Bookbinders, International Brotherhood of	10	451
Boot and Shoe Workers' Union	5	1,091
Brewery, Flour, Cereal and Soft Drink Workers, International Union of United	16	750
Bricklayers', Masons' and Plasterers' International Union of America	41	924
Bridge, Structural and Ornamental Iron Workers, International Association of	4	148
Carpenters and Joiners of America, United Brotherhood of	87	6,287
Carvers' Association of North America, International Wood	1	13
Cigar Makers' International Union of America	2	212
Clothing Workers of America, Amalgamated	20	6,505
Commercial Telegraphers' Union	8	1,796
Committee for Industrial Organization	2	206
Conductors, Order of Sleeping Car	1	26
Coopers' International Union of North America	[1]	1
Electrical, Radio and Machine Workers of America, United	4	1,500
Electrical Workers, International Brotherhood of	42	4,115
Elevator Constructors, Operators and Starters, International Union of	8	333
Engineers, International Union of Operating	21	1,023
Fire Fighters, International Association of	42	2,400
Firemen and Oilers, International Brotherhood of	38	787
Fishermen's Union of the Pacific, United	1	280
Foundry Employees, International Brotherhood of	1	450
Fur Workers' Union, International	8	1,656
Garment Workers of America, United	7	750
Garment Workers' Union, International Ladies'	17	8,014
Glass Bottle Blowers' Association of the United States and Canada	3	90
Glass Workers' Union of North America, American Flint	3	121
Government Employees, American Federation of	1	7
Granite Cutters' International Association of America	2	38
Hatters, Cap and Millinery Workers' International Union, United	7	2,035
Hod Carriers', Building and Common Labourers' Union of America, International	9	560
Hotel and Restaurant Employees' International Alliance and Bartenders' International League of America	27	2,555
Industrial Workers of the World	6	1,156
Iron, Steel and Tin Workers of America, Amalgamated Association of	[2]	[2]
Jewellery Workers' Union, International	3	550
Lathers, International Union of Wood, Wire and Metal	3	100
Laundry Workers' International Union	2	90
Lithographers of America, Amalgamated	7	464
Locomotive Engineers, Brotherhood of	99	4,800
Locomotive Firemen and Enginemen, Brotherhood of	96	5,271
Longshoremen and Warehousemen's Union, International	3	160
Longshoremen's Association, International	29	4,500
Machinists, International Association of	78	7,600
Maintenance-of-Way Employees, Brotherhood of	196	13,000
Marble, Stone and Slate Polishers, Rubbers and Sawyers, Tile and Marble Setters' Helpers and Terrazzo Workers' Helpers, International Association of	3	66
Metal Polishers', Buffers', Platers' and Helpers' International Union	2	26
Metal Workers' International Association, Sheet	14	647
Mine, Mill and Smelter Workers, International Union of	12	2,500
Mine Workers of America, United	72	19,000
Moulders' Union of North America, International	28	2,249
Musicians, American Federation of	29	5,000
Newspaper Guild, American	3	400
Painters, Decorators and Paperhangers of America, Brotherhood of	27	1,446
Paper Makers, International Brotherhood of	35	3,112
Pattern Makers' League of North America	5	208
Paving Cutters' Union of the United States and Canada	4	100
Photo-Engravers' Union of North America, International	5	497
Plasterers' and Cement Finishers' International Association of the United States and Canada, Operative	13	425
Plumbers and Steamfitters of the United States and Canada, United Association of Journeymen	36	2,400

---

[1] No branches reported in Canada. [2] See Steel Workers' Organizing Committee.

3.—International Trade Unions Operating in Canada, showing Individual Numbers of Branches and Memberships, as at Dec. 31, 1937—concluded.

International Organization.	Branches.	Membership Reported.
	No.	No.
Pocket Book and Novelty Workers' Union, International Ladies' Handbag	2	300
Porters, Brotherhood of Sleeping Car	2	60
Printers', Die Stampers' and Engravers' Union of North America, International Plate	1	42
Printing Pressmens' and Assistants' Union of North America, International	19	1,289
Pulp, Sulphite and Paper Mill Workers, International Brotherhood of	44	9,600
Quarry Workers' International Union of North America	1	59
Railroad Signalmen of America, Brotherhood of	10	264
Railroad Telegraphers, Order of	13	5,000
Railroad Trainmen, Brotherhood of	92	11,456
Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, Brotherhood of	94	6,932
Railway and Motor Coach Employees of America, Amalgamated Association of Street, Electric	26	7,056
Railway Carmen of America, Brotherhood of	112	11,733
Railway Conductors of America, Order of	67	2,384
Retail Clerks' International Protective Association	3	153
Roofers', Damp and Waterproof Workers' Association, United Slate, Tile and Composition	1	35
Rubber Workers of America, International United	12	2,938
Seamen's Union of America, International	1	135
Siderographers, International Association of	1	8
Stage Employees and Moving Picture Machine Operators of the United States and Canada, International Alliance of Theatrical	34	950
Steel Workers' Organizing Committee	20	8,929
Stereotypers' and Electrotypers' Union, International	10	358
Stonecutters' Union of North America, Journeymen	14	300
Switchmen's Union of North America	6	56
Teamsters, Chauffeurs, Stablemen and Helpers, International Brotherhood of	29	3,420
Textile Workers' Organizing Committee of the C.I.O.	2	29
Train Despatchers' Association, American	[1]	15
Typographical Union, International	50	4,388
Upholsterers', Furniture, Carpet, Linoleum and Awning Workers' International Union of North America	5	525
Woodworkers of America, International	14	3,000
Totals	**2,048**	**217,465**

[1] No branches reported in Canada.

Table 4 shows the numbers of branches and the reported total membership of Canadian central labour bodies operating in Canada at the close of 1937. At the foot of the table are shown the statistics of the National Catholic and independent unions, thus giving a grand total of all Canadian unions which have no affiliation with the international movement. If these figures are added to the totals of internationally affiliated unions shown in Table 3, the result will correspond to the total labour union membership in Canada as shown on page 788.

4.—Canadian Central Labour Bodies Operating in Canada, showing Individual Numbers of Branches and Memberships, as at Dec. 31, 1937.

Organization.	Branches or Affiliates.	Membership Reported.
	No.	No.
Trades and Labour Congress of Canada	119[1]	10,861[1]
All-Canadian Congress of Labour	83[1]	8,425[1]
Canadian Federation of Labour	2[1]	387[1]
Beet Workers' Union, Alberta	9	660
Building Workers of Canada, Amalgamated[2]	20	1,839
Carpet Weavers' Beneficial Association, Canadian Brussels	9	239
Civil Servants of Canada, Amalgamated	42	4,096
Civil Service Association of Alberta[3]	13	1,336
Electrical Communication Workers of Canada[2]	–	563
Electrical Trades Union, Canadian[4]	4	700
Engineers of Canada, National Union of Operating[4]	1	1,852

For footnotes, see end of table, p. 792.

4.—Canadian Central Labour Bodies Operating in Canada, showing Individual Numbers of Branches and Memberships, as at Dec. 31, 1937—concluded.

Organization.	Branches or Affiliates.	Membership Reported.
	No.	No.
Engineers, Canadian Association of Stationary	24	780
Express Employees, Brotherhood of	28	1,666
Farmer-Labour Union, New Brunswick	14	1,356
Fishermen's Federation of Nova Scotia	9	421
Fishermen's Union, Pacific Coast	11	800
Letter Carriers, Federated Association of[3]	67	1,681
Marine Engineers of Canada, National Association of[3]	16	777
Musicians, Canadian Federation of[2]	1	100
Native Brotherhood of British Columbia	17	1,127
One Big Union[2]	40	23,509
Postal Employees, Canadian[3]	26	1,337
Printing Trades' Union, Canadian National[2]	3	222
Railway Employees, Canadian Brotherhood of[4]	178	14,790
Railwaymen, Canadian Association of	79	3,281
Railway Mail Clerks' Federation, Dominion	17	918
Seamen's Union, Canadian[3]	3	4,800
Ships' Employees, Canadian Brotherhood of[2]	3	4,068
Shoe Workers' Union and Allied Crafts, Canadian	11	3,057
Steel Workers' National Union, Algoma[4]	1	2,281
Transport and General Workers of Canada[2]	3	704
Totals	**853**	**98,633**
National Catholic Unions	285	52,000
Independent bodies	72	16,521
Grand Totals, Non-International Bodies	**1,210**	**167,154**

[1] Local branch unions under direct charters at the close of 1937. [2] Affiliated with Canadian Federation of Labour. [3] Affiliated with Trades and Labour Congress of Canada. [4] Affiliated with All-Canadian Congress of Labour.

Section 6.—Fatal Industrial Accidents.

Statistics of fatal industrial accidents have been compiled by the Dominion Department of Labour since 1903, the data being obtained from provincial Workmen's Compensation Boards, the Board of Railway Commissioners for Canada and various other governmental authorities, from departmental correspondents, and from press clippings. Table 5 shows the numbers of fatal industrial accidents reported to the Department during each year from 1934 to 1938, inclusive. The number of fatalities in each of the different industries is also shown as a percentage of the total number.

5.—Fatal Industrial Accidents in Canada, by Industries, 1934-38.

Industry.	Numbers of Fatal Accidents.					Percentages of Fatal Accidents.				
	1934.	1935.	1936.	1937.	1938.[1]	1934.	1935.	1936.	1937.	1938.[1]
Agriculture	151	124	127	156	152	15·1	12·3	11·5	12·5	13·6
Logging	114	116	133	149	142	11·4	11·5	12·0	12·0	12·7
Fishing and trapping	47	38	57	52	30	4·7	3·7	5·1	4·2	2·7
Mining, non-ferrous smelting, and quarrying	144	175	181	201	236	14·4	17·4	16·3	16·1	21·2
Manufacturing	103	133	112	157	125	10·3	13·2	10·1	12·6	11·2
Construction	118	103	105	170	143	11·8	10·2	9·5	13·6	12·8
Electric light and power	20	25	14	23	19	2·0	2·5	1·3	1·8	1·7
Transportation and public utilities	165	184	240	227	161	16·5	18·2	21·7	18·2	14·5
Trade	52	44	45	46	43	5·2	4·4	4·1	3·7	3·9
Service	86	66	89	65	63	8·6	6·5	8·0	5·2	5·7
Miscellaneous	Nil	1	4	1	Nil	–	0·1	0·4	0·1	–
Totals	**1,000**	**1,009**	**1,107**	**1,247**	**1,114**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**

[1] Figures subject to revision.

Causes of Fatal Accidents.—The classification of fatal accidents in 1938, by causes, shows that the largest number, 310, came under the category "by moving trains, vehicles, etc.". This includes all accidents due to cars or engines, including mine and quarry cars, and to automobiles and other power vehicles and horse-drawn vehicles, as well as moving implements, water craft, and aircraft.

"Falling objects" caused 191 fatalities. Next in order as a cause came "falls of persons", 185 in number, including those who fell into pits, shafts, holds of vessels, harbours, rivers, etc. Fatalities numbering 168 were caused by dangerous substances, including electric current, explosives, hot and inflammable substances, gas fumes, boiler explosions, etc. Hoisting apparatus was responsible for 37 fatalities, while there were 34 due to the handling of heavy or sharp objects. Animals caused 34 fatal accidents, including 31 caused by horses. There were 33 fatalities caused by striking against or being struck by objects, 20 by working machines, 16 by prime movers, and 10 by tools. The category "other causes" includes 76 fatalities of which 23 were due to industrial disease, strain, etc., 19 to lightning, frost, storms, and sunstroke, 18 to cave-ins, landslides, ice-jams, etc., 8 to shooting and violence, 2 to infection not elsewhere classified, and 6 for which no particulars were available.

Numbers of industrial accidents, fatal and non-fatal, dealt with by the various provincial Workmen's Compensation Boards, are included in the following section dealing with workmen's compensation.

Section 7.—Workmen's Compensation in Canada.

An account of the development of workmen's compensation legislation in Canada from employers' liability legislation is given at pp. 744-746 of the 1927-28 Year Book, while a summary of the legislation with regard to workmen's compensation, including a statement of the scale of compensation in each province, as at Jan. 1, 1938, appears in the general sketch of labour legislation in Canada at pp. 795-796 of the 1938 edition. Details regarding the operation of the various Workmen's Compensation Boards of the provinces are given below.

Operation of the Workmen's Compensation Boards.—*Nova Scotia.*—The Workmen's Compensation Act was passed in 1915, but only became effective on Jan. 1, 1917. During the twenty-two years between that date and Dec. 31, 1938, 173,583 accidents were reported to the Board of which 155,666 were compensated. Prior to Jan. 1, 1920, medical aid was furnished in special cases only.

6.—Compensation and Medical Aid Paid, and Accidents Compensated by the Nova Scotia Workmen's Compensation Board, 1930-38.

NOTE.—Estimates for outstanding claims not included. Statistics for the years 1917-29 are given at p. 757 of the 1938 Year Book.

Year.	Compensation.	Medical Aid.	Total.	Accidents Compensated.
	$	$	$	No.
1930	949,828	129,399	1,079,227	8,821
1931	951,256	106,578	1,057,834	6,357
1932	688,448	84,281	772,729	5,024
1933	570,701	69,575	640,276	5,168
1934	794,717	113,860	908,577	8,063
1935	954,061	130,952	1,085,013	8,971
1936	1,160,738	167,255	1,327,993	10,246
1937	1,189,710	190,846	1,380,556	11,953
1938	1,976,154	206,233	2,182,387	11,225

New Brunswick.—The Workmen's Compensation Act of New Brunswick was passed in 1918. It extends to a wide range of industries, and is administered by a Board of three persons, levying assessments and paying benefits. For the sums paid out annually from 1930 to 1938 as compensation and for medical aid, see Table **7.**

7.—Compensation, Funeral Expenses, and Medical Aid Paid, and Reserves Held by the New Brunswick Workmen's Compensation Board, 1930-38.

NOTE.—Statistics for the years 1920-29 are given at p. 757 of the 1938 Year Book.

Year.	Weekly Compensation.	Permanent Partial Disability.	Fatal.		Medical Aid.		Permanent Total Disability Reserve.
			Funeral Expenses.	Reserve for Pensions.	Doctors' Fees and Transportation.	Hospital and Nursing Service.	
	$	$	$	$	$	$	$
1930	199,313	92,344	2,682	116,055	77,722	54,172	6,237
1931	181,676	73,774	1,581	72,481	79,021	60,183	[1]
1932	137,762	71,527	1,403	33,280	68,712	46,907	[1]
1933	145,063	103,742	2,126	63,649	88,304	63,572	20,521
1934	192,207	80,967	2,104	83,485	110,103	85,724	[1]
1935	195,763	91,382	2,388	86,161	111,470	83,221	10,273
1936	247,204	88,596	2,290	106,633	130,266	101,262	9,347
1937	304,033	79,246	2,101	73,180	140,014	108,521	[1]
1938[2]	173,230	32,202	1,300	57,696	64,107	36,894	7,326

[1] No reserve reported. [2] Figures subject to revision.

Quebec.—The Quebec Workmen's Compensation Commission was established in 1928 by authority of cc. 79 and 80 of the Statutes of that year. The Act was brought into force by proclamation on Mar. 22, 1928, operations of the Commission commencing as of Sept. 1, 1928. Under this Act, the Quebec Commission did not insure employers against their liability. On Apr. 4, 1931, a new Act was enacted by the Quebec Legislature (21 Geo. V, c. 100), effective Sept. 1, 1931, providing for state insurance, practically along the same lines as the Workmen's Compensation Act of Ontario. This new Act was amended by 23 Geo. V, c. 98, enacted on Apr. 13, 1933; by 25-26 Geo. V, c. 80, enacted on Apr. 11, 1935; by 1 Edw. VIII, cc. 39-40, enacted on Nov. 12, 1936; by 1 Geo. VI, c. 94, enacted on May 20, 1937; by 2 Geo. VI, c. 89, enacted on Apr. 12, 1938, and by 2 Geo. VI, c. 88, enacted on Aug. 1, 1938. Table 8 shows the operations of the Quebec Commission from Sept. 1, 1928, to Dec. 31, 1938.

8.—Compensation Paid and Accidents Compensated by the Quebec Workmen's Compensation Commission, 1928-38.

Year.	Claims.	Accidents Compensated.	Accident Cost.
	No.	No.	$
1928 (4 months)	8,266	2,625	209,764
1929	25,610	21,377	3,229,554
1930	20,900	19,850	3,792,346
1931 (8 months) old Act	12,534	13,204	2,758,785
1931 (4 months) new Act	12,734	12,717	1,237,738
1932	34,414	30,643	3,048,055
1933	30,462	26,723	2,237,504
1934	35,436	31,557	2,579,002
1935	40,521	35,163	3,396,413
1936	43,838	39,581	3,917,462
1937	70,355	62,616	5,669,368
1938[1]	58,000	52,300	4,584,952

[1] Figures subject to revision.

Ontario.—Under the system operated by the Ontario Workmen's Compensation Board in Schedule 1, where the liability is collective, 24 classes of industries pay various percentages of their payrolls annually to the Board, and escape individual civil liability for accidents and certain specified industrial diseases. The percentage of payroll collected by the Board is graded according to the degree of hazard in the occupation and ranged in 1938 from 15 cents per $100 of payroll in needle trades to $14·30 in wrecking and window cleaning. The average for all classes was $1·31 per $100 of payroll which amounted to $481,275,700. Certain other industries under Schedule 2, including municipal undertakings, railways, car shops, telegraphs, telephones, etc., are made individually liable to pay the rates of compensation fixed under the Act. Employees of the Dominion or of the province, killed or injured in the discharge of duty, are by special legislation placed on the same footing as those of private employers of the second class.

Statistics of the benefits awarded and the accidents to workers reported during the period 1930-38 appear in Table 9. During the year 1938, 51,925 accidents were *paid for*, including 281 cases of death, 13 of permanent total disability, 876 of permanent partial disability, 23,255 of temporary disability, and 27,500 in which medical aid only was provided; the latter are all under Schedule 1, as medical aid in Schedule 2 cases and Crown cases is furnished directly by the employer.

9.—Compensation and Medical Aid Paid, and Accidents Reported by the Ontario Workmen's Compensation Board, 1930-38.

NOTE.—Statistics for the years 1915-29 are given at p. 759 of the 1938 Year Book.

Year.	Benefits Awarded.				Accidents Reported.			
	Schedule 1.		Schedule 2 and Crown Compensation.	Total Benefits.	Schedule 1.	Schedule 2.	Crown.	Total.
	Compensation.	Medical Aid.						
	$	$	$	$	No.	No.	No.	No.
1930	4,942,756	1,336,046	1,144,216	7,423,018	61,490	4,486	3,291	69,267
1931	3,917,045	1,060,763	1,043,584	6,021,392	46,069	3,348	3,477	52,894
1932	3,202,639	817,240	1,105,741	5,125,621	35,264	2,474	3,732	41,470
1933	2,298,788	667,582	732,699	3,699,069	33,227	1,890	2,925	38,042
1934	2,745,239	841,738	912,730	4,499,707	44,858	2,244	7,628	54,730
1935	3,225,899	1,037,683	1,050,531	5,314,113	50,690	2,208	5,648	58,546
1936	3,553,282	1,058,642	1,031,874	5,643,798	55,878	2,515	2,989	61,382
1937	3,837,589	1,251,848	1,040,523	6,129,961	64,845	2,554	3,183	70,582
1938	4,362,618	1,153,895	947,748	6,464,261	[1]	[1]	[1]	59,834

[1] Not available.

Manitoba.—Under the Workmen's Compensation Act, effective Mar. 1 1917, Part I of the Act, dealing with workmen in hazardous occupations, is administered by the Workmen's Compensation Board, which charges insurance rates according to the hazard of the industry, the sums received by the workman being in lieu of the rights of action previously existing. The province, the city of Winnipeg, and certain corporations operating public utilities are permitted by the law to practise self-insurance.

The Workmen's Compensation Board also administers the provisions of the Dominion Act respecting payment of compensation of employees of His Majesty who are killed or suffer injuries while performing their duties, being c. 15 of the Statutes of 1918 and subsequent amendments.

From the date of the coming into force of the Manitoba Workmen's Compensation Act to Dec. 31, 1937, the Board has dealt with 128,256 compensable accidents and paid out $16,383,437 for compensation and medical aid. Of the accidents in 1937, 4,781 involved medical aid costs only, 4,120 involved temporary and 232 permanent disability, while 20 resulted in death. The figures quoted above and hereunder cover accidents dealt with under both provincial and Dominion legislation.

10.—Compensation and Medical Aid Paid, and Accidents Compensated by the Manitoba Workmen's Compensation Board, 1930-37.

NOTE.—Statistics for the years 1917-29 are given at p. 760 of the 1938 Year Book.

Year.	Benefits Awarded.			Accidents Compensated.
	Compensation.	Medical Aid.	Total.	
	$	$	$	No.
1930	952,760	240,734	1,193,494	8,310
1931	670,461	177,552	848,013	6,671
1932	636,975	165,969	802,944	5,695
1933	456,180	141,536	597,716	5,505
1934	562,276	169,598	731,874	6,578
1935	572,262	189,829	762,091	8,237
1936	702,321	211,307	913,628	9,299
1937	688,312	204,259	892,571	9,153

Saskatchewan.—The Workmen's Compensation (Accident Fund) Act became fully effective July 1, 1930, and covers practically all employees in the province except railway employees engaged in the running trades, casual workers, farm and ranch labourers, domestic and menial servants, janitors, retail store employees, and persons who cannot be classed as workmen.

The Act is administered by a Board of three and imposes compulsory collective liability on the employers covered. The schedule of benefits is similar to that provided by other compensation Acts. Table **11** shows the number of accidents and benefits paid for the period 1930-38.

11.—Compensation and Medical Aid Paid and Accidents Compensated by the Saskatchewan Workmen's Compensation Board, 1930-38.

Year.	Benefits Awarded.			Accidents Compensated.
	Compensation.	Medical Aid.	Total.	
	$	$	$	No.
1930 (6 months)	131,338	28,434	159,772	2,639
1931	308,662	100,748	409,410	3,969
1932	255,933	73,398	329,331	2,844
1933	224,738	58,099	282,838	2,389
1934	207,842	60,029	267,871	3,222
1935	245,065	70,670	315,735	3,568
1936	357,545	89,930	447,475	4,642
1937	349,862	98,928	448,791	4,296
1938	369,711	106,874	476,586	4,219

Alberta.—The Workmen's Compensation Act of 1918 became effective Aug. 1, 1918, as regards mining, and Jan. 1, 1919, in respect of almost all industries except agriculture, railroading, and the operation of retail stores and offices. Railroading (except for the running trades) was brought within the scope of the Act in 1919, and a further amendment in 1928 left only conductors and trainmen exempt from the operations of the Act.

Table 12 shows the operations of the Board for the calendar years 1930 to 1938. Of the 13,377 accidents reported in 1938, 51 were fatal and 112 resulted in permanent injury, as compared with 13,177 accidents reported in 1937, of which 43 were fatal and 103 resulted in permanent injury. The amounts shown below do not include sums transferred to the pension fund, which had assets amounting to $3,335,358 on Dec. 31, 1937, nor do they include administration expenses nor sums set aside to cover estimated liabilities. The numbers of accidents compensated shown in the last column do not include claims disposed of by payment only of accounts for medical aid.

12.—Compensation and Medical Aid Paid, and Accidents Reported and Compensated by the Alberta Workmen's Compensation Board, 1930-38.

Note.—Statistics for the years 1921-29 are given at p. 761 of the 1938 Year Book.

Year.	Benefits Awarded.			Accidents Reported.	Accidents Compensated.
	Compensation.	Medical Aid.	Total.		
	$	$	$	No.	No.
1930	498,015	264,780	762,795	12,607	6,091
1931	452,643	216,212	668,855	10,049	4,878
1932	407,284	203,745	611,029	8,974	4,607
1933	291,406	143,675	435,081	8,160	3,398
1934	312,092	169,490	481,582	9,608	4,090
1935	353,292	205,891	559,183	11,058	4,813
1936	436,498	262,801	699,299	12,381	4,834
1937	446,716	290,733	737,449	13,177	5,096
1938	468,626	317,807	786,433	13,377	6,367

British Columbia.—The Workmen's Compensation Act, effective Jan. 1, 1917, provides compulsory accident insurance in almost every industrial occupation carried on in the province, and in 1937 protected an estimated number of 143,000 employees with a payroll of almost $165,000,000. Insurance rates levied against employers are graded according to the hazard of the industry. All employers under the Act are required, in addition, to deduct one cent per day or part thereof from the wages of each employee and to remit this money to the Board to the credit of the medical aid fund. This fund provides all necessary medical, surgical, and hospital expenses for injured employees. Silicosis was added as an industrial disease in metal mining commencing Jan. 1, 1936.

13.—Compensation and Medical Aid Paid, and Accidents Compensated by the British Columbia Workmen's Compensation Board, 1930-37.

Note.—Figures for the years 1917-29 are given at p. 762 of the 1938 Year Book.

Year.	Benefits Awarded.			Claims (gross).
	Compensation.	Medical Aid.	Total.	
	$	$	$	No.
1930	3,403,743	773,397	4,177,140	33,285
1931	2,572,254	568,289	3,140,543	25,877
1932	1,860,021	447,423	2,307,445	19,011
1933	1,501,700	368,482	1,870,183	18,274
1934	1,590,817	410,126	2,000,943	22,354
1935	2,092,389	506,741	2,599,130	26,280
1936	2,536,166	595,894	3,132,060	29,677
1937	2,966,110	684,115	3,650,225	35,005

Section 8.—Strikes and Lockouts.

Statistics of strikes and lockouts in Canada have been collected by the Dominion Department of Labour since its establishment in 1900. Table **14** shows the numbers of disputes, of employees involved in disputes, and the time loss in man-working days for each year from 1930 to 1938 and the totals for the period 1901-29, inclusive. The items in the columns headed "Time Loss in Man-Working Days" in the tables following are calculated by multiplying the number of persons directly involved in strikes and lockouts by the number of working days they are so affected during the time the disputes are in existence. Tables **15** and **16** give detailed analyses, by provinces and by industries, for 1937 and 1938.

Summary tables of the figures with details as to strikes and lockouts during 1938 will be found in the *Labour Gazette* for March, 1939, pp. 251-281.

Industrial Disputes in Recent Years.—From 1930 to 1937 the figures as to numbers of strikes and lockouts, numbers of employees involevd, and time loss were substantially greater than during the period 1926 to 1930, but were still much lower than during the years prior to 1926 when coal-mining strikes involved large numbers of employees and resulted in great time loss. In 1938 figures were about the same as the average for the period 1926-30. Since 1930 most of the important disputes have been in clothing manufacturing, logging, sawmilling, and woodworking industries, with a substantial number in coal mining. In 1938, as in 1936 and 1937, strikes of textile factory workers occurred but not on nearly so large a scale. The largest strike of the year was that of sawmill workers at Fort Frances, Ont. Other important disputes were of fishermen at Lunenburg, N.S., lime-plant workers at Blubber Bay, B.C., automobile factory workers at Windsor, Ont., taxi drivers at Toronto, Ont., cotton-mill workers at Cornwall, Ont., restaurant employees at Toronto, and coal miners at Minto, N.B.

The number of disputes in 1938 was 147 as compared with 278 in 1937, the number of workers involved was 20,395 as compared with 71,905 in 1937, and the time loss 148,678 man-working days as compared with 886,393 in 1937. Table **14** includes figures regarding coal mining, industries other than coal mining, and all industries.

14.—Strikes and Lockouts in the Coal Mining, Other, and All Industries in Canada, 1930-38, with Totals for 1901-29.

NOTE.—For the years 1901-20, see the 1933 Year Book, p. 763, and for 1921-29 the 1938 Year Book, p. 763.

Year.	Coal Mining.			Industries other than Coal Mining.			All Industries.			
							Disputes—			
	Disputes in Existence during Year.	Workers Involved.	Time Loss in Man-Working Days.	Disputes in Existence during Year.	Workers Involved.	Time Loss in Man-Working Days.	In Existence during Year.	Beginning in Year.	Workers Involved.	Time Loss in Man-Working Days.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Totals, 1901-29.	**373**	**259,920**	**8,951,229**	**3,411**	**708,815**	**13,822,719**	**3,784**	**3,669**	**968,735**	**22,773,948**
1930.....	15	6,228	24,183	52	7,540	67,614	67	67	13,768	91,797
1931.....	9	2,129	11,523	79	8,609	192,715	88	86	10,738	204,238
1932.....	33	8,540	132,766	83	14,850	122,234	116	111	23,390	255,000
1933.....	21	3,028	33,019	104	23,530	284,528	125	122	26,558	317,547
1934.....	26	11,461	91,459	165	34,339	483,060	191	189	45,800	574,519
1935.....	17	6,131	61,032	103	27,138	222,996	120	120	33,269	284,028
1936.....	22	8,655	56,766	134	26,157	220,231	156	155	34,812	276,997
1937.....	44	15,477	112,826	234	56,428	773,567	278	274	71,905	886,393
1938.....	25	5,054	21,366	122	15,341	127,312	147	142	20,395	148,678

Table **15** is a record of industrial disputes by provinces for the years 1937 and 1938. In 1937 the important strikes by industries were located in the provinces as follows: in Ontario in textile, automobile, furniture, sawmilling, rubber, boot and shoe industries, and water transportation (pulpwood loaders and longshoremen); in Quebec in textile, clothing, meat-packing, foundry, and ship repair industries; in Nova Scotia in coal mining; in New Brunswick in coal mining and sawmilling; in Manitoba in fur manufacturing; in Alberta in coal mining and meat packing; in British Columbia in gold mining and meat packing.

In 1938 the main disputes by provinces and industries were as follows: in Ontario in logging and sawmilling, automobile, textile, boot and shoe, clothing (hats), and fur products industries; in Quebec in textile and leather products; in Nova Scotia in fishing and coal mining; in New Brunswick in coal mining; in Alberta and Saskatchewan in coal mining; in British Columbia in fishing.

15.—Strikes and Lockouts, showing Numbers of Workers Involved and Time Loss, by Provinces, 1937 and 1938.

Province.	1937.				1938.			
	Disputes.	Workers Involved.	Time Loss.		Disputes.	Workers Involved.	Time Loss.	
			Man-Working Days.	Per cent of Total.			Man-Working Days.	Per cent of Total.
	No.	No.	No.	No.	No.	No.	No.	No.
P.E. Island........	Nil	–	–	–	1	67	166	0·1
Nova Scotia.......	43	14,309	51,147	5·8	26	4,468	24,441	16·4
New Brunswick...	8	3,642	78,790	8·9	4	855	4,180	2·8
Quebec............	46	24,419	358,024	40·4	19	2,191	10,533	7·1
Ontario............	130	24,531	320,025	36·1	64	8,308	72,984	49·1
Manitoba..........	11	734	15,629	1·7	8	415	967	0·7
Saskatchewan.....	4	124	990	0·1	3	481	3,400	2·3
Alberta...........	17	2,413	15,094	1·7	11	1,720	9,874	6·6
British Columbia..	18	1,583	46,244	5·2	10	790	19,633	13·2
Interprovincial....	1	150	450	0·1	1	1,100	2,500	1·7
Totals........	**278**	**71,905**	**886,393**	**100·0**	**147**	**20,395**	**148,678**	**100·0**

Table **16** shows strikes and lockouts by industries during 1937 and 1938, the most important in 1937 occurring in manufacturing (mainly in textiles, clothing, etc.; metal products; and miscellaneous wood products), mining, logging, and transportation and public utilities; and during 1938 in manufacturing (mainly in textiles, clothing, etc.; metal products; and miscellaneous wood products), mining, transportation and public utilities, and fishing and trapping.

Causes and Results of Industrial Disputes.—In each of the previous years since the record was begun in 1901, the most important cause of disputes has been changes in wages, but in 1936 and in 1937 union questions (chiefly union recognition, the discharge of workers for union activity or membership, the employment of union members only) led to a great number of strikes and in 1938 such strikes were the same in number as those due to wage grievances, involving about the same number of employees and the same loss in working time. This time loss was 40 p.c. of the total for the year in each case.

Approximately one-third of all disputes were settled by direct negotiations, one-third by conciliation and arbitration, and one-quarter by the return of workers or their replacement. This shows a large increase in the number of disputes settled by conciliation and arbitration compared with previous years when negotiations ended about one-half of all disputes. As for results, the figures show that about one-third of the workers directly involved were successful, that nearly one-half were partially successful, and the remainder, one-sixth, were unsuccessful.

16.—Strikes and Lockouts, by Industries, 1937 and 1938.

Industry.	1937.					1938.				
	Number of Disputes.	Workers Involved.		Time Loss.		Number of Disputes.	Workers Involved.		Time Loss.	
		Number.	Per Cent of Total.	Man-Working Days.	Per Cent of Total.		Number.	Per Cent of Total.	Man-Working Days.	Per Cent of Total.
Agriculture	**2**	**78**	**0·1**	**58**	**0·0**	**1**	**10**	**0·1**	**85**	**0·1**
Logging	**7**	**3,010**	**4·2**	**26,575**	**3·0**	**4**	**870**	**4·3**	**1,750**	**1·2**
Fishing and Trapping	**1**	**800**	**1·1**	**1,600**	**0·2**	**8**	**1,848**	**9·1**	**22,744**	**15·3**
Mining, etc.[1]	**49**	**17,537**	**24·4**	**139,346**	**15·7**	**26**	**5,066**	**24·8**	**21,402**	**14·4**
Manufacturing	**145**	**46,344**	**64·4**	**687,510**	**77·6**	**73**	**7,460**	**36·6**	**81,339**	**54·7**
Vegetable foods, etc	9	509	0·7	1,629	0·2	7	303	1·5	1,214	0·8
Tobacco and liquors	3	257	0·3	1,554	0·2	1	9	0·1	100	0·1
Rubber products	5	1,370	1·9	27,880	3·1	2	31	0·1	175	0·1
Animal foods	4	950	1·3	27,800	3·1	[2]	[2]	–	[2]	–
Boots and shoes (leather)	7	1,505	2·1	10,350	1·2	6	715	3·5	4,156	2·8
Fur, leather, and other animal products	9	857	1·2	22,333	2·5	5	143	0·7	5,592	3·8
Textiles, clothing, etc	49	25,955	36·1	435,504	49·1	18	3,461	17·0	25,474	17·1
Pulp and paper	3	397	0·6	1,765	0·2	[2]	[2]	–	[2]	–
Printing and publishing	3	135	0·2	1,275	0·1	5	202	1·0	1,793	1·2
Miscellaneous wood products	20	4,871	6·8	41,664	4·7	10	991	4·9	18,991	12·8
Metal products	23	8,522	11·8	105,905	12·0	13	1,232	6·0	10,783	7·2
Non-metallic minerals, chemicals, etc	6	682	0·9	6,717	0·8	5	285	1·4	12,533	8·4
Miscellaneous products	4	334	0·5	3,134	0·4	1	88	0·4	528	0·4
Construction	**25**	**1,286**	**1·8**	**7,376**	**0·8**	**15**	**879**	**4·3**	**1,328**	**0·9**
Buildings and structures	9	330	0·5	2,087	0·2	8	418	2·0	603	0·4
Railway	1	50	0·1	125	0·0	[2]	[2]	–	[2]	–
Shipbuilding	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Bridge[1]	1	62	0·1	310	0·1	[2]	[2]	–	[2]	–
Highway	13	831	1·1	4,769	0·5	4	407	2·0	493	0·3
Canal, harbour, waterway	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Miscellaneous	1	13	0·0	85	0·0	3	54	0·3	232	0·2
Transportation and Public Utilities	**16**	**1,441**	**2·0**	**14,458**	**1·6**	**9**	**2,519**	**12·3**	**9,517**	**6·4**
Steam railways	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Electric railways	1	21	0·0	126	0·0	[2]	[2]	–	[2]	–
Water transportation	13	1,409	2·0	14,299	1·6	[2]	[2]	–	[2]	–
Local transportation	2	11	0·0	33	0·0	3	1,430	7·0	3,160	2·1
Telegraph and telephone	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Electricity and gas	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Miscellaneous	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Trade	**7**	**188**	**0·3**	**4,156**	**0·5**	**5**	**1,489**	**7·3**	**3,439**	**2·3**
Finance	[2]	[2]	–	[2]	–	[2]	–	–	–	–
Service	**26**	**1,221**	**1·7**	**5,314**	**0·6**	**6**	**254**	**1·2**	**7,074**	**4·7**
Public administration[1]	1	12	0·0	75	0·0	[2]	[2]	–	[2]	–
Recreational	9	928	1·3	3,494	0·4	[2]	[2]	–	[2]	–
Custom and repair	3	53	0·1	310	0·0	3	180	0·9	1,050	0·7
Business and personal	13	228	0·3	1,435	0·2	3	74	0·3	6,024	4·0
Miscellaneous	[2]	[2]	–	[2]	–	[2]	[2]	–	[2]	–
Totals	**278**	**71,905**	**100·0**	**886,393**	**100·0**	**147**	**20,395**	**100·0**	**148,678**	**100·0**

[1] Non-ferrous smelting is included with "Mining"; erection of all large bridges is under "Bridge" construction; water service is under "Public administration". [2] None reported.

Section 9.—Employment and Unemployment.

Subsection 1.—Operations of the Employment Service of Canada.

Employment Service of Canada.—Under Sec. 3 of the Employment Offices Co-ordination Act (c. 57, R.S.C., 1927), an Act passed by the Dominion Parliament in May, 1918, the Minister of Labour is empowered:—

(1) to aid and encourage the organization and co-ordination of employment offices and to promote uniformity of methods among them;

(2) to establish one or more clearing houses for the interchange of information between employment offices concerning the transfer of labour and other matters;

(3) to compile and distribute information received from employment offices and from other sources regarding prevailing conditions of employment.

The Act further provides that certain sums of money are to be appropriated annually and paid to the provinces on a basis proportionate to the amount that each expends on the maintenance of employment offices.

The desired uniformity and co-ordination of employment-office activities throughout the various provinces are obtained by having the Dominion's payments contingent upon an agreement ensuring that the provinces, in the conduct of their employment offices, shall endeavour to fill situations in all trades and occupations for both men and women, and that no charge shall be made to employers or employees for this service. Each province agrees to maintain a provincial clearance system in co-operation with the interprovincial clearance system established by the Dominion Government, in order to secure the necessary mobility of labour as between localities in the same province or in different provinces. For the fiscal year 1938-39, agreements were concluded with all of the provinces except Prince Edward Island. Thus a chain of employment offices reaching from Halifax to Vancouver, administered intra-provincially by the Provincial Governments but co-ordinated interprovincially by the Dominion Government, constitutes the Employment Service of Canada. At the time the Act came into force only 12 provincial employment offices were operated in Canada. This number was steadily increased until, at the close of 1919, owing to the impetus given by the requirements of the demobilization period, offices were functioning at 84 different centres. Subsequent contractions have reduced the Service to offices permanently located at 74 centres (on Dec. 31, 1938), distributed by provinces as follows: Nova Scotia, 4; New Brunswick, 3; Quebec, 11; Ontario, 30; Manitoba, 4; Saskatchewan, 9; Alberta, 5; and British Columbia, 8.

Employment Service Council of Canada.—An Order in Council, issued in 1918 in pursuance of the Act, provided for the formation of a body to be advisory to the Minister of Labour in the administration of the Act. This body, known as the Employment Service Council of Canada, is composed of representatives of the Dominion Departments of Labour and Pensions and National Health, the Provincial Governments, the Canadian Manufacturers' Association, the Canadian Construction Association, the Trades and Labour Congress of Canada, the Railway Association of Canada, the railway brotherhoods, the Canadian Lumbermen's Association, the Canadian Council of Agriculture, and the returned soldiers. At the eleven meetings of the Council, the most recent of which was held on Aug. 21-22, 1930, various recommendations and suggestions relative to employment office administration were brought forward and presented to the Minister.

Operations of Employment Offices.—Statistics covering the work of the local offices are collected and tabulated by the Employment Service Branch of the Department of Labour. Table **17** shows the positions available, applications for work and placements effected by the Service in each year since 1930 for the Dominion, and for the years 1937 and 1938 by provinces. During 1938 there were 782,664 applications for employment, 401,241 vacancies, and 382,295 placements recorded, as compared with 712,223 applications, 418,388 vacancies, and 389,536 placements in 1937. About 33 p.c. of the total placements were of a casual nature, many of these being the result of work given on a rotation basis by municipalities and Provincial Governments on various relief schemes throughout the year to persons who otherwise would have been unemployed.

Reduced Railway Fares.—In order to facilitate the movement of labour in cases where there are not enough workers in any one locality to fill the available vacancies, the Employment Service, by special arrangement with nearly all the members of the Canadian Passenger Association, has been granted the privilege of issuing certificates which entitle the bearers to purchase railway tickets at the reduced rate of 2·5 cents per mile. This rate is for a second-class ticket and is applicable only to fares of not less than $4. During 1938, 6,167 certificates were issued, 5,631 to persons proceeding to points within the same province as the dispatching office and 536 to workers going to points in other provinces. During 1937, 14,158 certificates for special rates were granted, 11,961 to persons travelling to employment within the same province as the dispatching office and 2,197 to persons for whom employment had been secured in other provinces.

17.—Applications for Employment, Positions Offered, and Placements Effected by the Employment Service of Canada, 1930-38, and by Provinces, 1937 and 1938.

NOTE.—For figures by provinces from 1920 to 1936, see corresponding table of previous Year Books, commencing with the 1926 edition. Totals for the years 1920-29 are given at p. 766 of the 1938 edition.

Year and Province.	Applications Registered.		Vacancies Notified.		Placements Effected.	
	Men.	Women.	Men.	Women.	Men.	Women.
Totals, 1930	**463,103**	**149,887**	**278,835**	**107,199**	**274,227**	**94,452**
Totals, 1931	**685,460**	**140,693**	**391,857**	**94,527**	**389,231**	**82,277**
Totals, 1932	**512,695**	**139,733**	**282,643**	**83,385**	**278,975**	**73,239**
Totals, 1933	**531,041**	**143,180**	**282,120**	**87,565**	**278,589**	**73,508**
Totals, 1934	**569,301**	**155,064**	**327,907**	**99,885**	**324,900**	**81,191**
Totals, 1935	**498,466**	**157,955**	**268,300**	**108,274**	**265,212**	**88,590**
Totals, 1936	**515,930**	**164,123**	**241,098**	**114,278**	**237,476**	**93,974**
Totals, 1937	**543,343**	**168,880**	**290,790**	**127,598**	**286,618**	**102,918**
Totals, 1938	**584,727**	**197,937**	**276,851**	**124,390**	**275,338**	**106,957**
Nova Scotia 1937	9,581	5,687	9,248	4,916	9,149	4,428
1938	9,869	7,301	8,358	5,816	8,329	5,452
New Brunswick 1937	4,963	5,636	4,386	5,601	4,344	5,589
1938	6,855	5,765	6,238	5,697	6,229	5,697
Quebec 1937	104,349	45,867	45,268	43,670	45,826	28,513
1938	127,745	53,617	59,649	42,060	59,713	29,587
Ontario 1937	239,539	68,836	115,290	43,000	110,090	36,379
1938	222,446	74,972	80,596	35,438	79,456	33,254
Manitoba 1937	47,348	10,265	28,040	8,424	30,037	8,055
1938	54,670	15,692	31,653	10,644	31,948	10,276
Saskatchewan 1937	23,660	10,079	21,160	8,954	20,204	7,751
1938	37,380	14,309	26,442	11,340	25,954	10,442
Alberta 1937	47,703	9,409	22,422	5,486	22,073	4,727
1938	47,220	11,359	21,807	6,992	21,647	5,869
British Columbia 1937	66,200	13,101	44,976	7,547	44,895	7,476
1938	78,542	14,922	42,108	6,403	42,062	6,380

Subsection 2.—Unemployment as Reported by Trade Unions.

Monthly statistics on unemployment are compiled and published by the Employment Service Branch of the Dominion Department of Labour, based on returns received from about 1,850 local trade unions, having an aggregate membership of approximately 225,000 workers. "Unemployment" as here used means involuntary idleness due to economic causes. Persons engaged in work other than their own trades, or idle because of illness, are not considered as unemployed, while unions involved in industrial disputes are excluded from the tabulations. As the number of unions making returns varies from month to month, with consequent variation in the membership upon which the percentages of unemployment are based, it should be understood that the figures for each month have reference only to the reporting organizations. Table 18 is a record of unemployment in trade unions for the past 9 years, by provinces. The maximum of unemployment in

1938 was in December, when the percentage stood at 16·2; the 1938 low was 10·4 p.c. recorded in September. In 1937 the January figure of 14·5 p.c. constituted the maximum, and the minimum of 7·6 p.c. was reached in August. Employment among organized workers, as indicated by these statistics, was less on the average in 1938 than in 1937, the average of the monthly figures of unemployment for 1938 being 13·1 p.c., while for 1937 the corresponding figure was 10·7 p.c.

18.—Percentages of Unemployment in Trade Unions, by Provinces, half-yearly, 1930-37, and by months, 1938.

NOTE.—For percentages of unemployment at June 30 and Dec. 31 from December, 1915, to December, 1929, see p. 827 of the 1934-35 edition of the Year Book. For data by months from 1921, see successive issues of the Year Book commencing with the 1922-23 edition.

Month.	Year.	Nova Scotia and P.E.I.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
June	1930	3·3	2·8	17·5	7·4	9·2	8·9	14·3	8·4	10·6
December	1930	7·5	8·7	22·8	17·3	14·2	15·9	13·8	16·8	17·0
June	1931	7·2	6·5	20·0	16·2	14·1	13·5	21·7	15·6	16·3
December	1931	13·8	9·6	29·0	20·3	16·5	19·5	16·9	21·2	21·1
June	1932	9·6	12·0	27·1	23·4	18·1	14·4	23·4	22·3	21·9
December	1932	8·4	16·5	30·9	28·5	20·9	20·8	22·8	26·0	25·5
June	1933	13·8	13·0	26·2	23·3	19·4	14·9	24·5	18·6	21·8
December	1933	11·2	11·5	23·2	24·9	20·3	17·2	17·6	19·8	21·0
June	1934	11·4	7·3	22·9	15·9	17·0	12·1	24·8	17·2	18·0
December	1934	4·7	7·2	24·5	18·7	16·1	13·1	9·0	24·6	18·0
June	1935	12·2	8·1	21·9	12·0	13·7	9·4	20·1	13·2	15·4
December	1935	7·8	7·5	20·6	13·4	13·1	11·6	9·6	15·9	14·6
June	1936	6·7	7·8	19·0	13·3	8·4	6·4	17·2	10·5	13·9
December	1936	6·8	6·2	20·9	13·8	10·9	12·8	6·4	12·7	14·3
June	1937	5·9	4·7	15·3	7·6	5·7	7·2	16·6	8·0	10·4
December	1937	3·3	4·6	16·5	12·9	16·8	10·6	6·7	15·8	13·0
January	1938	3·5	5·3	16·5	11·5	11·3	10·8	7·3	17·9	12·4
February	1938	4·6	5·9	19·0	12·8	10·6	9·4	8·8	17·3	13·7
March	1938	4·0	6·1	16·9	11·6	11·8	10·5	13·0	14·6	12·8
April	1938	3·6	9·2	14·5	13·6	9·9	11·8	18·1	15·6	13·1
May	1938	3·8	10·5	17·0	12·4	9·4	10·3	18·1	13·8	13·2
June	1938	3·6	14·8	17·1	12·4	12·5	9·7	17·8	14·3	13·5
July	1938	3·5	15·0	19·8	12·8	9·7	8·4	16·6	12·5	14·0
August	1938	5·3	12·0	16·7	9·4	8·3	5·7	13·3	11·3	11·6
September	1938	5·4	9·9	14·9	8·8	10·1	3·8	9·0	9·1	10·4
October	1938	6·0	11·2	16·8	11·5	11·8	6·3	8·5	12·2	12·3
November	1938	6·5	10·6	18·2	13·2	15·2	11·0	8·8	12·8	13·7
December	1938	8·4	9·8	21·2	14·5	21·4	11·8	9·5	17·3	16·2

Subsection 3.—Employment as Reported by Employers.

The Dominion Bureau of Statistics tabulates monthly reports of the numbers employed by firms having 15 or more persons on their staffs; the returns are representative of practically every industry except agriculture, domestic and personal service, and the more specialized professional callings. During 1938, about 10,720 of these employers reported an average working force of 1,069,780 persons, varying from 1,001,970 at Apr. 1, to 1,119,291 at the beginning of October.

These employment statistics have been shown in a special study*, which correlates the distribution of workers covered in 1931 with the distribution of workers enumerated at the 1931 Census, to be representative, so far as several major industrial groupings are concerned, of the census classification.

---

* See the report "Comparison of the Geographical and the Industrial Distribution of the Workers Included in the Monthly Employment Surveys, with the Geographical and Industrial Distribution of the Workers Enumerated at the Census of 1931", by M. E. K. Roughsedge, obtainable from the Dominion Statistician, Ottawa.

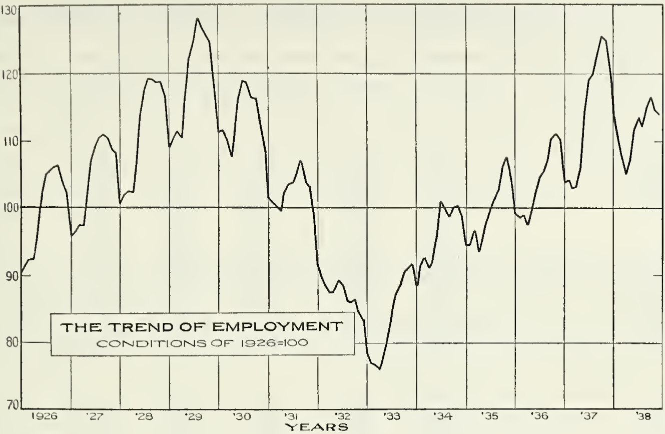
The census of occupations showed 2,570,097 wage-earners in the Dominion, of whom 2,100,139 or 81·7 p.c. were at work on the census date (June 1, 1931). Obviously it is with those at work that the monthly employment figures for the same date must be compared. The 7,865 firms making returns for June 1, 1931, reported 940,875 employees, being 36·6 p.c. of the total number of persons reporting themselves as actual or potential wage-earners, and 44·8 p.c. of those at work in all industries at the census date. When the classes of workers not covered in the employment surveys are deducted from the census figures, there remains a total of 1,318,954 persons at work at the census date in the industries sampled in the monthly record, or a total of 1,369,351 if a due proportion of the unspecified workers is included. The employment survey for June 1, 1931, constituted 71·3 p.c. of this adjusted figure, *i.e.*, of the census total for the comparable industries without the unspecified workers, and 68·7 p.c. if a proportion of the unspecified workers is regarded as belonging in the census statistics adjusted industrially for this comparison. This sample may be considered quite adequate, but it would be rather larger if comparison could be made with a similar census taken at the present time, since the number of co-operating firms is constantly growing, having risen from 7,965 at June 1, 1931, to 10,178 at June 1, 1937, or 9,690 at June 1, 1936; the June 1 comparison is used so that the seasonal factor may not enter into the case. The increase in the co-operating employers is accompanied by a growth in the ratio of wage-earners sampled, though the latter increase is not in proportion to the gain in the number of reports tabulated, owing to the fact that the firms now being added to the mailing list tend to employ staffs below the average.

Representation in "Manufacturing" when correlated, is shown to be 82·8 p.c. of the workers enumerated at the census in the same industrial group; in mining it was 96·9 p.c.; in communications 80·4 p.c.; and in transportation 64·2 p.c. It follows that the figures of employment collected monthly may be used as a good index of the movement of the wage-earning population in intercensal years. (See also pp. 809-812).

Employment during 1937 reached a particularly high level, exceeded only by that of the boom year 1929; while there was in 1938 some slackening of this unusually great industrial activity, employment was nevertheless maintained at a level higher than that of 1936 and previous years of the record, except 1929 and 1930. Based on the 1926 average as 100, the 1938 index averaged 111·8, as compared with 114·1 in 1937 and 103·7 in 1936, the previous maximum since 1930. In 1929, when industrial activity in Canada was at its maximum, the index averaged 119·0, while in 1933, the year of minimum employment, the average was 83·4.

The general situation reported in 1938 was repeated with but little variation in the different units of population and industries, in most of which employment was at a lower level than in 1937, but generally exceeded that reported in 1936 and earlier years since 1930. In the eight leading industrial cities, the volume of employment on the whole continued less than elsewhere in Canada, but the average indexes approximated rather more closely to those of the Dominion than was the case in 1937.

The fluctuations in general industrial employment in the past 13 years are illustrated in the following chart. This shows, to Dec. 1, 1938, the generally upward movement that characterized business activity from 1933 to 1937 together with the slowing up evident in 1938, which, however, left industrial employment at a generally higher level than in 1936 and earlier years since 1930.



Employment by Economic Areas.—Employment in the Maritime Provinces Ontario, and British Columbia was quieter in 1938 than in the preceding year, while in Quebec and the Prairie Provinces the indexes averaged slightly higher. In Quebec, the gain was due mainly to an increase in unemployment relief works, while that in the prairie area reflected improvement in the agricultural situation. In all five economic areas, employment generally was at a higher level than in 1936 and immediately preceding years.

In each of the economic areas, manufacturing showed curtailment as compared with 1937, and mining was more active. Among the other industrial divisions, however, less uniformity was seen, but logging, transportation, and construction in most areas did not afford so much employment. Trade and services generally showed a slightly upward movement.

19.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927.

Note.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated economic area to the total reported by all employers making returns in Canada at Dec. 1, 1938. Averages for 1921-26, inclusive, are given at p. 770 of the 1938 Year Book.

Year.	Maritime Provinces.	Quebec.	Ontario.	Prairie Provinces.	British Columbia.	Canada.
Averages, 1927	**103·7**	**104·0**	**105·6**	**105·3**	**101·1**	**104·6**
Averages, 1928	**106·6**	**108·3**	**113·8**	**117·9**	**106·4**	**111·6**
Averages, 1929	**114·8**	**113·4**	**123·1**	**126·3**	**111·5**	**119·0**
Averages, 1930	**118·3**	**110·3**	**114·6**	**117·1**	**107·9**	**113·4**
Averages, 1931	**108·1**	**100·9**	**101·2**	**111·5**	**95·5**	**102·5**
Averages, 1932	**92·2**	**85·5**	**88·7**	**90·0**	**80·5**	**87·5**
Averages, 1933	**85·3**	**82·0**	**84·2**	**86·2**	**78·0**	**83·4**
Averages, 1934	**101·0**	**91·7**	**101·3**	**90·0**	**90·4**	**96·0**
Averages, 1935	**103·7**	**95·4**	**103·3**	**95·2**	**97·7**	**99·4**

19.—Index Numbers of Employment as Reported by Employers in Economic Areas, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927—concluded.

Year and Month.	Maritime Provinces.	Quebec.	Ontario.	Prairie Provinces.	British Columbia.	Canada.
1937.						
January 1	109·5	104·0	107·5	94·2	95·4	103·8
February 1	107·5	106·7	108·4	91·4	91·3	104·1
March 1	106·6	102·5	108·9	91·3	89·2	102·8
April 1	105·4	102·2	108·8	89·4	97·5	103·0
May 1	110·7	105·2	111·2	93·2	103·4	106·3
June 1	122·0	113·6	118·8	99·3	112·2	114·3
July 1	135·8	118·0	122·2	104·0	117·1	119·1
August 1	134·3	120·8	122·2	105·6	116·9	120·0
September 1	135·4	124·5	125·0	109·4	121·2	123·2
October 1	134·9	127·3	130·4	107·6	117·9	125·7
November 1	127·3	130·5	130·4	106·2	111·5	125·2
December 1	122·5	129·6	125·8	100·5	107·5	121·6
Averages, 1937	**121·0**	**115·4**	**118·3**	**99·3**	**106·8**	**114·1**
1938.						
January 1	115·8	119·7	117·5	96·2	97·8	113·4
February 1	112·3	114·5	116·2	91·7	96·4	110·4
March 1	108·3	110·1	113·7	92·2	96·2	107·8
April 1	103·6	107·4	109·6	89·4	100·2	105·0
May 1	107·3	112·6	109·9	91·5	102·8	107·4
June 1	110·9	120·4	112·5	97·0	105·1	111·9
July 1	116·7	119·9	114·0	99·8	108·0	113·5
August 1	112·6	117·8	111·2	104·9	107·1	112·1
September 1	113·2	118·1	115·0	112·2	112·0	115·1
October 1	114·5	121·6	115·8	113·2	111·3	116·7
November 1	112·6	119·7	115·0	108·1	107·5	114·6
December 1	109·8	121·7	114·4	103·5	105·8	114·0
Averages, 1938	**111·5**	**117·0**	**113·7**	**100·0**	**104·2**	**111·8**
Relative weights of employment in economic areas, as at Dec. 1, 1938	7·4	30·8	41·3	12·2	8·3	100·0

Employment by Cities.—While improvement over 1937 was reported in Montreal and Quebec city, this was due in the main to an increased program of unemployment relief works; the activity connected with the Eucharistic Congress during the summer of 1938 also helped the situation in Quebec. The remaining six centres for which data are segregated—Toronto, Ottawa, Hamilton, Windsor, Winnipeg, and Vancouver—reported curtailment; the decline in the index ranged from 0·6 p.c. in Toronto to 5·5 p.c. in Windsor. If the figures for the two Quebec cities are eliminated from the city total, the percentage reduction in the other municipalities closely approximates that in the Dominion as a whole.

Despite the gains from 1937 in Montreal and Quebec city, the indexes in those centres, and in five of the others for which separate tabulations are made, were lower than the general index, Windsor being the exception.

Activity in the leading cities taken as a unit, which in the pre-depression years was at practically the same level as general industrial employment, has lagged since 1934. While the index for the eight cities continued below that for Canada as a whole, the discrepancy was rather less in 1938 than it had been in 1937, approximating that shown in 1936. The general index in 1937 had been lowered by the employment level in the cities, while in 1938 the reverse was the case, an index from which the city figures are eliminated showing a falling-off of 4·1 points as compared with that of 2·3 points in the general index.

Employment generally in manufacturing, communications, trade, services, and construction in the larger cities, has not yet reached a level equal to that in other parts of Canada. The most outstanding difference in this comparison, as in 1937, was in construction, in which the index for the cities averaged 75·2 during 1938, compared with the Canada figure of 105·4; in the building division, the indexes were 52·7 and 60·1, respectively. The former, however, showed a slight gain over the 1937 figure of 50·9, while the Dominion index was the same in 1937 and 1938. The city employment index for transportation in each of these years, was above the Canada figure, standing in1938 at 90·7, compared with 84·4 throughout the Dominion.

20.—Index Numbers of Employment as Reported by Employers in Leading Cities, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of employees reported in the indicated city to the total reported by all employers making returns in Canada at Dec. 1, 1938. Averages for 1922-26, inclusive, are given at p. 772 of the 1938 Year Book.

Year and Month.	Montreal.	Quebec.	Toronto.	Ottawa.	Hamilton.	Windsor.	Winnipeg.	Vancouver.
Averages, 1927....	**103·0**	**111·3**	**105·7**	**107·7**	**103·1**	**86·2**	**104·1**	**100·7**
Averages, 1928....	**108·2**	**119·9**	**112·1**	**115·8**	**108·2**	**137·3**	**110·1**	**104·3**
Averages, 1929....	**115·3**	**124·2**	**121·3**	**120·7**	**128·4**	**153·2**	**112·3**	**109·2**
Averages, 1930....	**111·8**	**125·3**	**116·3**	**123·1**	**113·9**	**128·6**	**107·6**	**109·8**
Averages, 1931....	**102·5**	**122·2**	**107·7**	**119·5**	**101·3**	**88·3**	**97·1**	**104·5**
Averages, 1932....	**88·1**	**101·8**	**95·2**	**99·3**	**83·7**	**78·4**	**86·6**	**88·5**
Averages, 1933....	**81·0**	**95·1**	**87·5**	**90·2**	**74·6**	**75·9**	**80·2**	**83·0**
Averages, 1934....	**84·5**	**95·1**	**93·5**	**99·5**	**84·1**	**93·1**	**82·9**	**87·4**
Averages, 1935....	**87·3**	**96·9**	**97·5**	**102·2**	**92·6**	**115·0**	**87·8**	**96·6**
Averages, 1936....	**92·1**	**95·2**	**101·5**	**106·3**	**98·3**	**121·3**	**92·3**	**103·7**
1937.								
January 1......	90·4	92·0	103·4	102·8	99·0	137·1	92·4	105·3
February 1......	91·8	91·7	101·9	98·8	101·7	145·2	89·4	104·7
March 1......	92·6	92·7	103·2	99·8	103·7	146·8	90·8	103·8
April 1......	96·8	93·3	105·8	101·9	108·2	151·4	91·6	104·4
May 1......	101·1	97·6	107·4	106·6	111·9	152·9	93·5	105·6
June 1......	105·2	101·6	108·7	111·8	114·2	153·1	96·5	110·8
July 1......	105·5	106·4	109·5	114·9	116·3	149·8	99·2	114·8
August 1......	105·2	108·6	107·8	112·7	117·7	135·0	97·6	117·3
September 1......	107·6	110·0	110·0	113·7	119·4	132·2	98·8	119·6
October 1......	107·4	107·2	112·6	114·4	117·3	146·2	97·6	117·9
November 1......	106·4	103·8	112·7	111·7	119·4	154·1	98·0	115·0
December 1......	104·3	99·3	111·9	105·2	116·2	153·1	95·4	109·5
Averages, 1937....	**101·2**	**100·3**	**107·9**	**107·9**	**112·1**	**146·4**	**95·1**	**110·7**
1938.								
January 1......	99·0	100·0	108·4	104·9	109·8	147·8	92·0	108·4
February 1......	97·5	97·9	106·1	101·4	107·9	154·3	89·3	105·3
March 1......	98·5	99·7	105·6	99·7	106·1	153·1	89·6	104·2
April 1......	100·6	100·4	106·0	101·7	106·4	148·9	89·6	104·6
May 1......	104·5	103·8	106·3	103·0	107·2	148·9	91·6	105·9
June 1......	107·3	103·8	106·7	106·3	106·6	146·0	92·8	106·4
July 1......	106·4	109·1	107·4	106·8	109·9	128·8	95·2	111·0
August 1......	104·7	109·6	105·6	107·7	108·3	105·2	95·2	112·2
September 1......	106·6	110·2	108·1	109·0	109·2	121·1	96·5	114·9
October 1......	108·2	117·1	109·4	108·3	104·1	126·7	96·3	114·7
November 1......	107·1	119·1	109·6	106·1	103·8	130·6	94·7	110·4
December 1......	106·2	119·2	108·8	105·6	102·4	148·2	94·6	110·6
Averages, 1938....	**103·9**	**107·5**	**107·3**	**105·0**	**106·8**	**138·3**	**93·1**	**109·1**
Relative weights, by cities, as at Dec. 1, 1938....	15·1	1·5	12·7	1·3	3·0	1·9	3·8	3·3

Employment by Industries.—With only a few exceptions, the various industries reported curtailment in 1938 as compared with 1937, but most divisions showed a higher level of employment than in 1936 and earlier years since 1930. Manufacturing gained only slightly from the beginning to the end of 1938, as compared with an average advance of nearly 9 p.c. between Jan. 1 and Dec. 1 in the period, 1921-37. The index for the twelve months was 111·0, compared with 114·4 in 1937, but with 103·4 in 1936. Most branches of factory employment reported that activity was reduced from the 1937 level, but the great majority afforded more employment than in 1936. Mining as a whole showed slight improvement over the preceding year, and employment therein was at its maximum for the eighteen years of this record; the advance took place in the metallic ore division. Logging, following the exceptional activity of 1937, was quiet in the year under review. The indexes averaged rather higher than in 1936, but this was due to the situation which prevailed in the earlier months of 1938, employment since May being below its level in the same period of 1936.

The volume of employment afforded in trade was practically the same as in 1937, when the index was higher than in other years for which data are available. In the service group, consisting mainly of hotels and restaurants, and laundries and dry-cleaning establishments, the annual index was slightly above that for other years of the record. Communications showed little general change from 1937, when those industries provided employment for a greater number of persons than in any other year since 1932. The transportation index was fractionally lower than in the preceding year, but showed a very slight gain over 1936.

Construction generally was rather brisker than in 1937; this was due mainly to the higher level of employment reported in the earlier months of the year under review, although improvement over the same period of 1937 was reported at the beginning of November and December. The construction index also averaged higher than in 1936. Building showed no general change as compared with 1937, but was brisker than in 1936; highway work afforded more employment than in any other year since 1934, partly owing to unemployment relief projects. On the other hand, railway construction and maintenance provided employment for a smaller number of men than in any of the four preceding years.

21.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927.

NOTE.—These indexes are calculated upon the average for the calendar year 1926 as 100. The relative weight shows the proportion of the employees reported in the indicated industry to the total reported by all employers making returns in Canada at Dec. 1, 1938. Averages for 1921–26, inclusive, are given at p. 773 of the 1938 Year Book.

Year.	Manufacturing.	Logging.	Mining.	Communications.	Transportation.	Construction and Maintenance.	Services.	Trade.	All Industries.[1]
Averages, 1927	103·4	109·3	107·0	103·8	102·5	109·0	106·2	107·4	104·6
Averages, 1928	110·1	114·5	114·4	108·2	105·9	118·8	118·1	116·1	111·6
Averages, 1929	117·1	125·8	120·1	120·6	109·7	120·7	130·3	126·2	119·0
Averages, 1930	109·0	108·0	117·8	119·8	104·6	129·8	131·6	127·7	113·4
Averages, 1931	95·3	60·1	107·7	104·7	95·8	131·4	124·7	123·6	102·5
Averages, 1932	84·4	42·6	99·2	93·5	84·7	86·9	113·6	116·1	87·5
Averages, 1933	80·9	66·5	97·5	83·9	79·0	74·6	106·7	112·1	83·4
Averages, 1934	90·2	124·7	110·8	79·1	80·3	109·3	115·1	117·9	96·0
Averages, 1935	97·1	126·9	123·3	79·8	81·2	97·8	118·2	122·1	99·4
Averages, 1936	103·4	138·7	136·5	81·0	84·1	88·2	124·5	127·5	103·7

---

[1] Except agriculture (see p. 803).

21.—Index Numbers of Employment as Reported by Employers, by Industrial Groups, as at the First of each Month, January, 1937, to December, 1938, with Yearly Averages since 1927—concluded.

Year and Month.	Manufacturing.	Logging.	Mining.	Communications.	Transportation.	Construction and Maintenance.	Services.	Trade.	All Industries.[1]
1937.									
January 1	102·4	242·1	145·6	80·7	81·4	61·2	124·8	136·9	103·8
February 1	105·3	244·4	147·6	79·8	80·7	57·2	119·1	128·4	104·1
March 1	107·6	193·3	145·8	80·8	79·6	52·8	118·9	126·1	102·8
April 1	110·8	132·5	146·0	81·4	79·5	53·7	122·7	127·5	103·0
May 1	113·8	86·7	147·4	82·9	85·1	71·4	125·2	128·4	106·3
June 1	117·9	109·1	151·9	85·6	86·7	105·2	129·0	131·5	114·3
July 1	119·0	125·0	153·6	88·0	89·4	128·5	137·5	133·4	119·1
August 1	118·1	124·7	153·7	89·9	89·1	139·8	141·7	132·2	120·0
September 1	121·2	143·4	159·1	90·9	89·7	144·5	146·6	130·9	123·2
October 1	121·7	208·5	163·9	90·5	90·4	144·3	135·4	133·4	125·7
November 1	119·0	306·3	161·1	88·9	87·2	131·7	131·0	137·0	125·2
December 1	116·3	355·4	162·3	85·9	84·1	104·2	130·6	139·6	121·6
Averages, 1937	**114·4**	**189·3**	**153·2**	**85·4**	**85·2**	**99·5**	**130·2**	**132·1**	**114·1**
1938.									
January 1	108·6	323·6	155·2	85·1	82·0	81·9	132·5	141·7	113·4
February 1	110·3	290·7	154·3	82·9	79·6	71·6	128·4	127·9	110·4
March 1	110·5	212·7	153·9	82·2	79·0	71·4	127·1	126·0	107·8
April 1	110·8	115·0	151·3	82·5	78·5	71·6	129·8	127·1	105·0
May 1	110·6	97·5	149·7	82·5	83·9	88·2	131·9	131·3	107·4
June 1	112·3	93·6	153·3	84·7	84·9	114·5	135·3	131·5	111·9
July 1	111·8	86·1	154·5	87·2	86·3	124·9	146·1	133·3	113·5
August 1	110·0	59·6	153·6	88·2	86·9	128·0	143·5	132·1	112·1
September 1	113·8	58·6	157·4	88·3	88·7	133·8	146·7	131·0	115·1
October 1	112·5	78·8	160·8	87·2	90·1	143·5	136·1	134·5	116·7
November 1	110·9	130·8	163·4	85·5	87·9	122·5	132·8	135·6	114·6
December 1	110·1	166·4	163·3	84·0	85·0	112·8	131·7	139·7	114·0
Averages, 1938	**111·0**	**142·8**	**155·9**	**85·0**	**84·4**	**105·4**	**135·2**	**132·6**	**111·8**
Relative weights, by industries, as at Dec. 1, 1938	51·7	4·4	7·0	2·1	9·4	11·5	2·6	11·3	100·0

[1] Except agriculture (see p. 803).

Subsection 4.—Employment and Unemployment Statistics of the Census.

In the 1933 edition of the Year Book, pp. 775-780 were devoted to an examination of the preliminary figures of unemployment as reported at June 1, 1931, for that date and for the preceding twelve months. The final results of this inquiry are available in Vol. VI of the Census Publications, which may be obtained from the King's Printer, Ottawa, at a price of 75 cents for the paper-bound volume.

Tables 24 and 25, on p. 836 of the 1934-35 Year Book, summarize, by industries, the statistics of those actually unemployed at the date of the census, and of time lost during the twelve months preceding that date.

Estimates of Employment of the Wage-Earning Population.*—The term 'unemployment' is, unfortunately, variously interpreted but it is of the utmost importance that it should be strictly defined; an explanation of the sense in which it is used in the censuses of Canada and in estimates of employment and unemployment made by the Bureau of Statistics, therefore, is given here.†

---

* Prepared by M. C. MacLean, M.A., F.S.S., Chief of Social Analysis, Dominion Bureau of Statistics.
† See also subsections 2 and 3 pp. 802 to 809 for other estimates.

A person, 10 years of age or over, enumerated by the Census is asked if he has a gainful occupation. All persons who answer "yes" are tabulated as gainfully occupied. In 1931 the number thus gainfully occupied was 3,927,230. These did not include such persons as female home workers, persons at school, etc. Many not so included might be occupied usefully and could be included in the broader class of "working population", but they were not occupied for direct financial gain. The family workers were considered gainfully occupied if assisting, without pay, in the business or other gainful occupation of the family head, but not if they were females assisting in the family house work. In addition, young persons who had never been gainfully occupied; persons retired from gainful occupations, whether through old age or sole dependence on income or charity; and persons in institutions, such as penitentiaries, were not included among the gainfully occupied.

The total of the gainfully occupied was then subdivided into four sub-classes, *viz.*, (1) wage-earners, *i.e.*, those employed by an employer and paid certain amounts for their services; (2) employers, *i.e.*, owners who employed labour (but not employed managers); (3) 'own accounts', *i.e.*, persons who were gainfully occupied on their own, but did not employ labour; (4) unpaid family workers in the business of the head. Although these four classes seem clearly distinct, many cases of doubtful classification arise in practice, e.g., the unskilled labourer on odd jobs is included in the class of wage-earners; on the other hand, a plumber is a wage-earner when he is hired by a plumbing establishment, but he is on own account when, if not so hired, he pursues his trade independently. The equipment he uses and the skill he has acquired and probably certain conditions of licensing, registration, or living in a certain locality make him a business man even if he does not employ others. The same is true of the carpenter, etc. The doctor who puts up his shingle is on own account, but if he is on the paid staff of a hospital he is a wage-earner. Likewise with the lawyer, etc. The storekeeper who owns his own business is an own account or employer, but if he is merely the manager and paid for his services by the chain or corporation he is a wage-earner.

The term 'unemployed' can, in practice, be applied only to the sub-class known as wage-earners. Persons who have never worked but are seeking work, and persons on own account who have lost their business and are looking for jobs, are technically unemployed, but there is no way in which the numbers of such can be obtained and used without introducing elements of doubt and misleading features that would render the data meaningless. Similarly, the number on own account who have lost their business or occupation and are seeking another should be entered as a separate class. The term 'unemployed', then, is restricted to wage-earners and is always used in that sense in Bureau of Statistics figures. To illustrate the point by an example: on June 1, 1931, 470,000 wage-earners 10 years of age or over were not working, 437,000 of them because of no job or temporary lay-off. These latter were definitely unemployed on that day. On the same day, after making allowance for the majority of pupils and students attending school, there were 894,022 others over the age of 10 years, or 713,981 over the age of 10 and under the age of 70 (excluding married females and other female heads of families not gainfully occupied), who could not be regarded as wage-earners, including about 103,000 persons retired on income between these ages. These persons were not employed but they could not be said to belong among the unemployed. In any case they were not considered unemployed by the census. Much confusion has been caused by comparing this figure of unemployed (437,000) in 1931 with an estimate or opinion at a later date of a number of persons out of work for which the comparable census figure would be

437,000 plus the 714,000 (non-wage-earners between 10 and 70 years referred to above). In other words, if between censuses we speak of the unemployed as all persons who at the time have no gainful work, we should compare that figure, not with the 437,000 of the census, but with 1,151,000.

Another point that should be made clear follows from the above definition of unemployment. If a person has first to become a wage-earner before he can be unemployed, a sudden increase in the wage-earner content of the population results in an increase in the potential unemployed upon the cessation of the activity which led them to become wage-earners. The number of wage-earners increased from 1,972,089 in 1921 to 2,570,097 in 1931, *i.e.*, 30 p.c., although the population increased only 18 p.c. The number actually working on June 1 increased from 1,778,328 in 1921 to 2,100,139 in 1931, *i.e.*, 18 p.c., or just as fast as the population. However, this increase in employment was not great enough to take care of the increase in wage-earners.

A further point also needs clarifying. In monthly figures of employment the persons counted are those on payrolls, but there are persons on these payrolls in a particular month who may be working on their own in another month. Thus, in a sudden expansion of road work, farmers are among the workers; after the work is done they become farmers once more. Similarly with adolescents who return to school, or female home-makers who take advantage of seasonal work. Such persons might constitute a very considerable proportion of the payrolls in the best seasons. Only so long as they are on payrolls are they wage-earners. This largely explains why the number of wage-earners varies so much from month to month in estimates of unemployment. When work starts up in one locality it absorbs some of the unemployed wage-earners of that locality and also others who had not previously worked, or who had worked on own account, and does not therefore cause a decrease in the number unemployed throughout the country comparable to the increase in employment. Thus the phenomenon of increasing employment unaccompanied by decreasing unemployment becomes intelligible enough.

Wage-Earners.—As already explained, the wage-earners are a sub-class of the larger class, the gainfully occupied, and figures of employment and unemployment should have sole reference to this sub-class. A full enumeration of wage-earners employed and unemployed can be obtained only at a census, but the expense of making an annual census would be prohibitive so that the decennial census must be relied upon for basic data upon which estimates for intervening years are made to show the intercensal trend. Such estimates are of value so long as they are interpreted as estimates and understood to be subject to some degree of error after all care has been taken. In making the estimates of unemployment, appearing in Table **22**, use was made of the studies of the composition of the population as to age and sex distribution, proportion at each age and sex gainfully occupied (a rather constant proportion in different centres and at different periods), and other factors affecting the problem, such as the movement between the different occupational classes of the population. This may be considered the grand base, starting from which a co-ordination of the unemployment statistics of the Department of Labour and the employment statistics of a branch of the Bureau of Statistics takes place. While the Department of Labour figures refer to unemployed union members and thus are not a sample of unemployment at large, they can be rendered more or less representative by making use of the relationship of their unemployment to unemployment at large, as shown in the census. The data on employment collected by the Bureau have been analysed mathematically for their ability to depict the situation in all industries, not only in the ones they cover, and found to be quite trustworthy; upon them, therefore, the total number actually employed in any month may be reasonably estimated. There remains the problem of estimating the fluctuations in the number of total wage-earners. From these data the number of unemployed is estimated. In brief, a percentage employed from month to month is calculated on: (1) the Department of Labour's figures of unions, corrected for sample qualities; (2) the Bureau's employment figures in relation to the total population normally gainfully occupied, this latter making allowance for the changing population content. The percentage is then applied to the census number employed to calculate the number of wage-earners in any month. The difference between the wage-earners and the number employed is obviously the unemployed. Another condition is exacted, *viz.*, the maintenance of a high correlation between factors (1) and (2) and in order to ensure this, checking at frequent intervals is resorted to to guard against any new element entering undetected into the equation used.

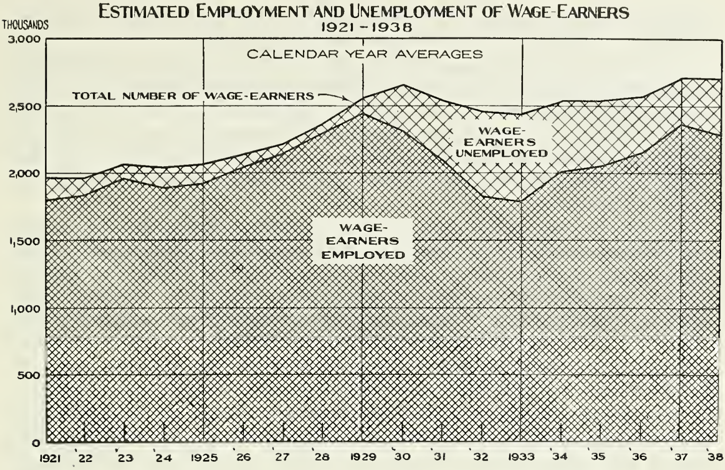
The table and chart which follow show the Bureau of Statistics estimates, worked out on this basis, of total wage-earners and of those employed, together with proportions employed for the years 1921-38, inclusive: monthly estimates are given for 1937 and 1938.

22.—Estimated Wage-Earners and Numbers and Proportions Actually Employed, calendar years 1921-38, and by months 1937 and 1938.

Year and Month.	Total Wage-Earners.	Number Employed.	Per Cent Employed.	Year and Month.	Total Wage-Earners.	Number Employed.	Per Cent Employed.
	'000	'000			'000	'000	
1921	1,971	1,795	91·1	1930	2,654	2,313	87·2
1922	1,967	1,830	93·0	1931	2,537	2,095	82·6
1923	2,059	1,958	95·1	1932	2,459	1,820	74·0
1924	2,042	1,897	92·9	1933	2,434	1,788	73·5
1925	2,063	1,920	93·1	1934	2,530	2,009	79·4
1926	2,140	2,041	95·4	1935	2,539	2,056	81·0
1927	2,209	2,147	97·2	1936	2,572	2,142	83·3
1928	2,359	2,299	97·5	1937	2,706	2,369	87·5
1929	2,551	2,444	95·8	1938	2,704	2,297	84·9
1937. (by months)				1938—con. (by months)			
January	2,596	2,144	82·6	March	2,619	2,163	82·6
February	2,571	2,116	82·3	April	2,649	2,212	83·5
March	2,570	2,120	82·5	May	2,704	2,304	85·2
April	2,595	2,188	84·3	June	2,725	2,338	85·8
May	2,680	2,353	87·8	July	2,715	2,306	85·0
June	2,747	2,453	89·3	August	2,746	2,378	86·6
July	2,747	2,470	89·9	September	2,748	2,402	87·4
August	2,781	2,536	91·2	October	2,737	2,359	86·2
September	2,812	2,587	92·0	November	2,744	2,346	85·5
October	2,819	2,577	91·4	December	2,697	2,225	82·5
November	2,795	2,504	89·6				
December	2,758	2,377	86·2				
1938. (by months)				1939. (by months)			
				January	2.678	2,193	81·9
January	2,703	2,300	85·1	February	2,684	2,193	81·7
February	2,661	2,225	83·6	March	2,655	2,161	81·4

Subsection 5.—Unemployment Relief.

The assistance rendered by the Dominion Government under relief legislation enacted during the years 1930-37, inclusive, is set out in previous issues of the Canada Year Book. The recapitulation appearing here shows the Dominion's disbursements as at Dec. 31, 1938, under each of the statutes enacted during the period 1930-37, inclusive, with respect to unemployment relief.



The Unemployment and Agricultural Assistance Act, 1938.—At the third session of the Eighteenth Parliament the Unemployment and Agricultural Assistance Act, 1938, which received the Royal Assent on May 25, 1938, was enacted. This statute, the administration of which is vested in the Minister of Labour, provides that the Governor in Council may authorize the execution of undertakings determined to be in the general interests of Canada. The statute further provides that agreements may be entered into by the Governor in Council with any of the provinces respecting the alleviation of unemployment conditions and of agricultural distress therein, to assist those in need, and for the granting of financial assistance to any province by way of loan, advance, or guarantee for the purpose of assisting the province to pay its share of the expenditures for such purposes.

Grants-in-Aid.—Under the provisions of the Unemployment and Agricultural Assistance Act, 1938, which expired on Mar. 31, 1939, the Dominion continued to assist all of the provinces, except New Brunswick, in discharging their responsibilities in connection with the granting of material aid to necessitous persons by way of grants-in-aid. As the province of New Brunswick did not distribute material aid, the Dominion agreed to contribute an amount, equal to that which would have been necessary by way of grants-in-aid, toward the cost to the province of an enlarged relief works program.

In accordance with the recommendations of the National Employment Commission, payment of the grants-in-aid to the provinces was covered by agreements which laid down regulations governing the granting of material aid to which the Dominion Government contributed. Under the agreements provision was made that, for the fiscal year ended Mar. 31, 1939, the Dominion would contribute towards the provinces' material aid expenditures 35 p.c. in the case of the Prairie Provinces and 30 p.c. in the case of British Columbia, Ontario, Quebec, Nova Scotia, and Prince Edward Island, or a maximum amount, whichever was the lesser. The maximum amounts provided for the fiscal year were as follows: Prince Edward Island $48,000; Nova Scotia $210,000; Quebec $4,800,000; Ontario $5,580,000; Manitoba,

$1,980,000; Saskatchewan, $2,430,000; Alberta, $1,500,000; British Columbia, $1,380,000.

For the purposes of the agreements, the term "material aid" was defined as meaning either food, fuel, clothing, and shelter, supplied to individuals in necessitous circumstances, or, subject to the approval of the Minister of Labour, the costs of carrying on works and training projects specifically designated by the provinces as projects intended to provide said individuals when employed thereon the equivalent of food, fuel, clothing, and shelter, which would otherwise have to be supplied to those individuals.

Under the terms of the agreements the provinces were required to maintain such residence regulations that no person would become ineligible to receive material aid by reason of having lost residence in a municipality or jurisdiction within the province before having established residence in another, and to require from all applicants for material aid, resident in a district in which there was an office or representative of the Employment Service of Canada (other than resident farm operators and those engaged in farm work), proof of application by them to the said Service for work and of determination by said Service of their employability.

It was further provided that the maximum value of material aid contributable to by the Dominion given to any head of family or other individual, of itself or together with any additional allowance for material aid made by the province or any of its municipalities, should be less than the normal earnings of an unskilled labourer in the district wherein the recipient resided, as averaged over the year preceding the granting of said aid. It was provided that in determining said maximum account might be taken for average loss of time, and in respect to heads of families adjustment might be made for normal earnings of dependants of employable age and of proved employability.

To remove from the minds of recipients of material aid the fear that in accepting such work as was available they might sacrifice the possibility of receiving material aid when further need arose, and to ensure that seasonal workers should make out of their earnings reasonable provision for seasonal unemployment, the agreements provided that the provinces should require such cities and towns as were designated by the provinces to provide for each person in those jurisdictions who was ceasing to receive material aid during the term of the agreements, by reason of entering gainful occupation, a statement of the rate of material aid granted prior to said cessation and a reasonable budget of expenditures for the breadwinner or family while the breadwinner was in gainful occupation. The provinces further agreed in this respect to require each applicant for further aid to obtain a properly certified statement of earnings to be filled in and signed by employers of the applicant prior to his or her readmission to material aid benefits.

Provision was made that no person other than a resident of Canada should be eligible for material aid, and that no person should, in relation to his or her eligibility for said aid, be discriminated against or favoured by reason of his or her race, religious views, or political affiliation.

Youth Training.—Operation of the Dominion-Provincial Youth Training Program on a somewhat extended basis during its second year was provided for by Parliament in the session of 1938. Parliament had voted $1,000,000 to be available in 1937, the first year of the program's operation. At the following session this sum was increased to $1,500,000, to be used during the fiscal year 1938-39. The increased amount enabled the Dominion Government to allocate larger sums, on a dollar-for-dollar basis, to the respective provinces for youth-training projects.

The procedure followed in the first year of the program was repeated in the second. Each of the nine provinces was notified by the Dominion Minister of Labour that a sum of money from the vote had been allocated to it for youth-training projects. Subsequently agreements laying down the general principles governing the program were drawn up and each was signed by the Dominion and the province concerned. As previously mentioned, the provinces agreed to contribute one-half the cost of youth-training projects, together with administration costs. These agreements were later approved by the Dominion and Provincial Governments.

Projects submitted by the provinces, approved by the Dominion and operated during 1938, followed along lines laid down in the first year of the program. Generally speaking, these projects might be classified under the following heads: urban occupational training; industrial apprenticeship and learnership; forestry work; agricultural training, both practical and technical; home service training for women; handicrafts and other specialized services; technical training in mining; practical training in hard rock and placer mining; and physical training.

The importance of vocational guidance and placement was emphasized during the second year of the program. In this connection it was recognized that one of the main objectives was to place in employment young men and women who had taken training courses. Placement officers were engaged in this work, and results fully justified their employment. Placements of those in training during 1938 exceeded the number recorded in the first year of the plan.

A glance at some of the projects operated during 1938 indicates the general nature of the program. Four provinces operated mining training projects, *viz.*, Nova Scotia, Quebec, Ontario, and British Columbia. The training offered by the several provinces varied somewhat. In both Nova Scotia and Quebec gold mines were operated, those in training receiving their instruction under direction of qualified mining engineers. A nucleus of skilled miners assisted learners to acquire familiarity with the use of their tools. Ontario again provided technical training, which was given at the Haileybury School of Mining. As the course lasted for six months, the number undergoing training had necessarily to be limited. In British Columbia training was more general in character, but with special attention being given to placer mining and prospecting.

Forest-training projects were operated in a number of the provinces. This type of training has proven its value, not only in rehabilitating youth but also from the point of view of forest conservation. Young men are put to work at a healthy, clean occupation which takes them into the open and develops them physically. They are taught useful lessons in forest conservation and allied occupations. They learn how to live together under healthy, open-air conditions, because forestry projects are centred in camps established for the purpose and located on or near the scene of operations. At the same time the forests of Canada, a great source of wealth to the Dominion, are protected and increased through the work done by those trained under the program. Not only are sources of fire danger removed, but the clearing away of dense undergrowth improves chances of survival and growth to maturity of trees which otherwise would rot and fall early in their lives. Reforestation and afforestation projects are also undertaken.

Particularly in Western Canada, agricultural training was prominent. Both men and women were given instruction in a wide variety of subjects with a view to increasing the economic return from their home farms. This instruction varied, in some degree, from province to province, but courses for men included such subjects as farm mechanics, operation and repair of farm machinery, construction of farm buildings, poultry, horticulture, dairying, farm management and accounting, soils and fertilizers, insects and pests, field and animal husbandry, and blacksmithing. Included in the women's courses were care and management of the home, food and cookery, catering for tourists, hospitality and etiquette, laundering, child care, home nursing and first aid, making and repair of clothing, handicrafts, social customs and courtesies, dairying and poultry, horticulture, and rural home crafts.

Courses in occupational training for commerce and industry were carried on in cities and towns of several provinces. In some cities instruction was limited to classes held in vocational schools in the day or evening, but in most localities special centres were opened and furnished with the necessary machinery and equipment. The teachers were qualified and had practical experience in the trades concerned. A number of such centres were supplied rent free and in a few cases light, heat, and water were also free of charge. This was made possible by the co-operation of municipal authorities, business firms, and interested individuals. The length of a course varied but was usually of six months' duration, with 30 or 40 hours' instruction each week.

Classes for young men were given in motor mechanics, radio servicing, electricity and house wiring, machine shop practice, painting, plastering, wood-working and carpentry, diesel engineering, and other trade subjects; for young women there were classes in business and commercial subjects, dressmaking, power-sewing, machine operation, waiting on table, salesmanship, cookery and other forms of specialized work connected with the home.

In addition to such urban occupational training to prepare young people for employment, provision has been made for assisting industry to train workers either as apprentices or learners. An apprentice is a young person under contract with an employer to learn a skilled trade. A learner is a young person under training to acquire sufficient dexterity to become a qualified operator in a semi-skilled occupation.

Home service training schools for women were operated in every province of the Dominion. These were uniformly successful both from the point of view of training and of placement. In a number of the provinces physical training and recreational projects were operated.

Farm Placements.—The agreements entered into with the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia under the Unemployment and Agricultural Assistance Act, 1937, respecting the placement on farms of unemployed persons who would otherwise be in receipt of aid, expired on Mar. 31, 1938, together with the legislation under which they were executed. Under the provisions of the Unemployment and Agricultural Assistance Act, 1938, these agreements were, at the request of the provinces, extended to Apr. 30, 1938. During October, 1938, agreements with the four western provinces, effective from Oct. 1, 1938, to Mar. 31, 1939, were executed providing for the Farm Employment Plan, with payment to the individual placed on the farm of an allowance equal at the end of the period to $7·50 per month. Provision was also made for the purchase of suitable work clothing at a cost not in excess of $3 for each individual, while the necessary costs of transportation of workers from the point of employment to the home of the employing farmer were also contributed to by the Dominion under the terms of the agreements. The basis of the Dominion's contribution to the provinces under the provisions of the Farm Employment agreements was the same as under the 1937 agreements, *viz.*, 50 p.c., the provinces bearing all necessary administration expenses. The largest number of placements during any one month under the 1937 agreements was effected during January, 1938, when 42,733 persons were placed. This number was made up as follows: Manitoba 10,244, Saskatchewan 26,772, Alberta 5,439, British Columbia 278.

Supplementary Works Plan.—With British Columbia, where the size of farms does not lend itself to the best development of the Farm Employment Plan, an agreement was made whereby the Dominion and the province would participate on an equal basis and provide forestry and road work for 4,640 persons for the period from Nov. 1, 1938, to Mar. 31, 1939.

Agricultural Assistance.—As drought conditions during the growing season of 1937 had created a condition of agricultural distress which was considered to be of national importance, the Dominion Department of Agriculture assumed the administration of material aid and feed and fodder relief as from Sept. 1, 1937, in 170 rural municipalities and local improvement districts in Saskatchewan and 52 in Alberta. It was necessary to continue the distribution of material aid under the Unemployment and Agricultural Assistance Act, 1938, until returns from the 1938 crop might be in sight.

The agreements with the provinces under which material aid was distributed were therefore renewed for the period April to June, 1938, inclusive, and later were extended to the end of August. The amounts expended under the agreements for the five-month period were $3,391,765 in Saskatchewan and $299,077 in Alberta.

Adverse crop conditions were again widespread in Saskatchewan in 1938 and it was found necessary to continue to assist the province in the maintenance of the settlers and their stock in the dried-out districts. An agreement was reached for the period Sept. 1, 1938, to Mar. 31, 1939, whereby the Dominion undertook to pay the full costs of material aid and feed and fodder relief in a newly-defined drought area, consisting of 92 municipalities, to a maximum amount of $4,500,000. Approximately five-sixths of this amount was required for material aid and the remainder for feed and fodder.

Another activity of the Department of Agriculture under the Unemployment and Agricultural Assistance Act, 1938, was the re-establishment of settlers in the provinces of New Brunswick, Saskatchewan, Alberta, and British Columbia. This was a continuation of the policy of the previous year and the agreements with the four provinces arrived at under the 1937 Act were extended, with slight modifications in one or two instances. The program was designed to assist settlers in pioneer areas to become self-sustaining and expenditures under the agreements were made chiefly for the breaking and clearing of land and the purchase of building materials, farm implements, and live stock. The amounts made available under the agreements for the year 1938-39 were as follows: New Brunswick $25,000; Saskatchewan $250,000; Alberta $75,000; British Columbia $15,000.

Mining Transportation Facilities and Highways to Further Development of Tourist Traffic.—Under the Unemployment and Agricultural Assistance Act, 1938, and by appropriations provided by Parliament to the Department of Mines and Resources in the Supplementary Estimates, 1938-39, agreements were made with all of the provinces for assistance in the construction of roads or other transportation facilities into mining areas, and for construction of highways to further development of tourist traffic. The agreements with the respective provinces provided for assistance up to specified maximum amounts for either one or both of the above purposes. Aid to mining transportation projects was provided in all provinces except Prince Edward Island and New Brunswick on the uniform basis of payment by the Dominion of two-thirds of the construction costs of projects recommended by the provinces and approved by the Dominion. While Dominion aid in developing tourist highways was not entirely confined to assistance under the Act, the agreements with the provinces granted financial assistance to tourist road construction. The Dominion assistance for tourist road projects was uniformly 50 p.c. of the costs of construction of approved projects, except in Quebec, Manitoba, and Saskatchewan. In the latter two provinces it was desired to undertake larger programs than could be assisted at the above ratio and eventually arrangements were made to grant 10 p.c. in Saskatchewan and approximately 30 p.c. in Manitoba to the costs of approved projects.

The Golden-Revelstoke highway is the uncompleted section of the Trans-Canada highway in British Columbia. The road comprises a total of 192·6 miles, of which 20·5 miles are to be completed. The Dominion entered into an agreement with the province of British Columbia to build this highway at the Dominion's expense, and the province, when advised that construction of a specified portion or portions of the highway had been completed, agreed to take over, maintain, and repair, at its own expense, these portions.

The Kingsgate-Kootenay highway is the main tourist approach road in British Columbia leading from Kingsgate on the International Boundary to the southwest limit of Kootenay National Park. Under an agreement with the province of British Columbia, this road is being reconstructed and paved by the province, and involves 153 miles. The Dominion's contribution toward this project is on an equal basis.

The Waterton Lakes-Calgary-Banff highway is the main tourist highway in Alberta from Waterton Lakes Park to Calgary and Banff Park. The bituminous surfacing of this highway is being carried out by the province under an agreement whereby the Dominion contributes 50 p.c. of the expenditure. All grading and surfacing necessary on this route prior to surface treatment is the responsibility of the province, which will bear the entire cost of such work.

Relief Settlement.—The Dominion continued to assist the provinces of Quebec, Manitoba, and Alberta in placing selected families who would otherwise be in receipt of material aid on the land under the Relief Settlement Plan outlined on p. 762 of the 1937 Canada Year Book. The number of settler families and individuals approved and settled under the various agreements entered into with the provinces respecting relief settlement since 1932 are set forth in Table 23.

23.—Settler Families and Individuals Approved and Settled under the Relief Settlement Agreements to Dec. 31, 1938.

Province.	Settler Families.	Total Individuals.
	No.	No.
Nova Scotia	343	2,154
Quebec	2,842	17,246
Ontario	606	2,990
Manitoba	1,442	7,156
Saskatchewan	939	4,604
Alberta	874	4,116
British Columbia	52	285
Totals	**7,098**	**38,551**

Table **24** sets forth the Dominion's disbursements to Dec. 31, 1938, for assistance provided under relief legislation since 1930.

The summary of loans to the western provinces and the C.P.R. outstanding as at the same date is: Manitoba, $22,534,097; Saskatchewan, $54,255,179; Alberta, $26,079,198; British Columbia, $32,957,211; C.P.R., $2,447,223; total, $138,272,907.

21.—Disbursements by the Dominion for Assistance Provided Under Relief Legislation, 1930-38.

Item.	1930 Act.	1931 Act.	1932 Act.	1933 Act.	1934 Act.	1935 Act.	1936 Act.	1937 Act.	1938 Act.	Total.
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
Disbursements to Provinces—										
Prince Edward Island....	95	129	25	99	147	287	291	125	32	1,230
Nova Scotia............	834	1,070	580	1,261	574	1,295	1,110	590	156	7,470
New Brunswick..........	504	763	220	593	425	1,060	910	510	157	5,142
Quebec.................	3,292	5,437	4,253	8,297	6,346	7,503	10,953	6,915	2,000	54,996
Ontario................	4,692	11,101	7,987	12,914	11,045	16,209	13,983	7,185	4,512	89,628
Manitoba...............	1,600	3,324	1,741	2,372	2,120	3,563	4,466	3,076	1,523	23,785
Saskatchewan...........	1,689	8,225	5,612	2,715	7,710	8,794	9,245	6,217	1,981	52,188
Alberta................	1,281	3,038	1,300	1,572	1,468	1,781	2,595	2,320	1,151	16,506
British Columbia........	1,376	3,940	3,228	3,448	2,301	2,283	3,500	2,671	1,146	23,893
Yukon and Northwest Territories............	20	10	3	5	Nil	10	Nil	Nil	Nil	48
Disbursements through Dominion Government Departments............	57	4,596	1,036	7,643	8,398	8,252	607	23,514	4,499	58,602
Other Disbursements—										
Board of Railway Commissioners............	500	500	Nil	Nil	Nil	Nil	Nil	Nil	Nil	1,000
C.P.R..................	864	209	"	"	"	"	"	"	"	1,073
C.N.R..................	882	Nil	"	"	"	"	"	"	"	882
Administration expenses.	43	85	68	87	89	140	179	225	125	1,041
Miscellaneous............	Nil	Nil	Nil	Nil	Nil	21	1	Nil	Nil	22
Totals............	**17,729**	**42,427**	**26,053**	**41,006**	**40,623**	**51,198**	**47,840**	**53,348**	**17,282**	**337,506**

Subsection 6.—National Registration of Persons on Material Aid.

The National Employment Commission Act, 1936, under which the National Employment Commission* was established in May, 1936, required the Commission to undertake a national registration and classification of persons on aid throughout Canada [Sec. 6 (*a*)]. To meet this obligation there was set up the Registration Branch of the Commission, which, in co-operation with the governments of the provinces and municipalities, took a first national registration of persons on aid, where the Dominion contributed financially to such aid, in September, 1936. In order to secure current figures, comparable with those available for September, 1936, the provinces and municipalities were required to provide follow-up returns each month commencing with October, 1936. In September, 1937, a second registration was taken, based upon the experience of the previous registration, and this, too, was subsequently kept up to date month by month.

In Section III of its final report, the National Employment Commission recommended that the work of the registration be carried forward under the Minister of Labour, after the termination of the work of the Commission itself. Consequently, when the Commission ceased to exist at Feb. 1, 1938, the work of the registration was placed under the Department of Labour as the National Registration Branch, where it has been carried forward on the same basis; a third national registration, comparable with those of the two preceding years, was taken in September, 1938.

From the commencement of the national registration, the number of local authorities throughout Canada issuing aid has averaged about 2,000; the success of the registration depends upon receiving complete and reasonably prompt returns from each of these authorities.

---

* See the 1937 Year Book, pp. 1052-1053, and the 1938 Year Book, pp. 778-779.

In addition to the registration of persons on material aid* throughout the municipalities and provinces, special registrations have been maintained since January, 1938, of pensioners on aid, and of Indians on aid, through the Department of Pensions and National Health and the Indian Affairs Branch of the Department of Mines and Resources, respectively.

Monthly reports are published by the Department of Labour which give detailed statistics as to numbers, classes, employability, etc.

Statistics of Persons on Aid.—Prior to the inception of national registration, general statistics of persons in receipt of material aid were secured through reports furnished to the Dominion Commissioner of Unemployment Relief by the several provinces distributing aid. The Dominion monthly averages so reported for the years up to 1936 are as follows: 1932 (8 months), 833,989; 1933, 1,227,558; 1934, 1,135,901; 1935, 1,162,563; 1936, 1,148,083. Table **25** shows the Dominion totals of persons on both urban and agricultural aid for each month in 1937 and 1938. Persons on agricultural aid constituted 35·9 p.c. of the monthly average for 1938. Agricultural aid is largely confined to the Prairie Provinces; Saskatchewan and Alberta receiving 86·4 and 6·6 p.c., respectively, of such relief afforded in 1938. Table **26** shows the numbers of fully-employable persons on urban aid* by sex, for the same period, as derived from the national registration.

Subsequent to Apr. 1, 1937, the province of New Brunswick substituted a works program for material aid and consequently that province does not contribute to the registration totals on material aid as shown in these tables, for the months after the date mentioned. Moreover, in the case of all provinces the present figures include only persons receiving aid to which the Government of the Dominion contributed financially.

An analysis of the status of the 896,477 persons shown in Table **25** as receiving aid in December, 1938, reveals that 189,986, or 21·2 p.c., were heads of families,† 653,772, or 72·9 p.c., their dependants, while remaining 52,719, or 5·9 p.c., were classified as 'individual persons'.† Of the 604,666 persons shown as receiving urban aid, 132,482 were heads of families, of whom 106,035 were fully-employable, 14,834 partially-employable, and 11,613 were unemployable. Of the 45,804 recipients classified as individual persons, 24,300 were returned as fully-employable, 11,481 as partially so, and 10,023 as unemployable. Of the dependants of heads of families, totalling 426,380 receiving urban aid, 10,692 had been previously gainfully employed, 21,304 had never been employed, 651 were only partially-employable, and the remainder were classified as 'non-worker type dependants', including wives, children under 16 years, and other dependants of non-worker type over 16 years of age.

---

* Material aid refers only to direct relief, so that in the sense here used the term does not include persons being provided with work on relief projects paid for in wages, even though such work was undertaken to alleviate unemployment. Material aid is divided into urban aid and agricultural aid. Agricultural aid refers to assistance given to resident farm operators and their dependants for human subsistence, where such farmers would normally derive their livelihood from the land which they occupy. Urban aid refers to all persons other than farm operators and their dependants, and thus includes the unemployed and unemployable persons.

† 'Head of family' is used to designate a person who is socially responsible for the support of one or more dependants. An 'individual person' is one who is neither a dependant of a head of family nor has anyone dependent upon himself. The term 'wife' refers to the member of a family unit who performs the housekeeping duties and 'wives' are a subclassification of dependants. 'Dependants' are all who look to the head of a family for their support and thus 'dependants' include some adult employable persons still living under the parental roof.

25.—Persons on Urban and Agricultural Aid, by Months, 1937 and 1938.

Month.	1937.			1938.		
	Urban Aid.	Agricultural Aid.	Total, Material Aid.	Urban Aid.	Agricultural Aid.	Total, Material Aid.
	No.	No.	No.	No.	No.	No.
January	858,456	319,775	1,178,231	631,974	383,191	1,015,165
February	879,283	328,176	1,207,459	654,529	389,419	1,043,948
March	878,143	330,759	1,208,902	652,690	392,036	1.044,726
April	833,800	325,867	1,159,667	632,294	391,928	1,024,222
May	737,748	300,152	1,037,900	575,960	380,492	956,452
June	636,290	264,495	900,785	520,880	363,687	884,567
July	563,899	229,372	793.271	497,127	339,429	836,556
August	511,390	232,844	744,234	471,099	286,536	757,635
September	455,839	269,076	724,915	444,732	108,872	553,604
October	470,811	331,235	802,046	473,262	167,795	641,057
November	513,475	363,073	876,548	534,893	251,936	786,829
December	580,341	376,583	956.924	604,666	291,811	896,477
Monthly Averages	**659,956**	**305,951**	**965,907**	**557,842**	**312,261**	**870,103**

In considering the question of unemployment, public attention is usually focussed on the fully-employable worker who is receiving urban aid. Table 26 shows the numbers of such persons, by sex, for each month in the years 1937 and 1938.

26.—Fully-Employable Persons on Urban Aid, by Months and Sex, 1937 and 1938.

Month.	1937.			1938.		
	Male.	Female.	Total.	Male.	Female.	Total.
	No.	No.	No.	No.	No.	No.
January	203.173	51,016	254,189	136,533	31,955	168,488
February	208,829	51,564	260,393	142,218	32,714	174,932
March	208,273	51,207	259,480	142,097	32,452	174,549
April	196,452	48,571	245,023	137,234	31,443	168,677
May	170,527	44,091	214,618	124,456	29,557	154,013
June	142,343	39,346	181,689	110,489	27,689	138,178
July	124,348	35,228	159,576	105,717	26,557	132,274
August	110,937	32,024	142,961	98,788	25,537	124,325
September	89,865	26,825	116,690	89,481	25,137	114,618
October	94,541	27,081	121,622	97,880	26,006	123,886
November	108,070	28,216	136,286	115,339	27,852	143,191
December	123,603	30,315	153,918	132,060	30,271	162,331
Monthly Averages	**148,413**	**38,790**	**187,203**	**119,358**	**28,931**	**148,289**

Section 10.—Old Age Pensions and Pensions for Blind Persons.

The Old Age Pensions Act, 1927.—Legislation respecting Old Age Pensions (R.S.C., 1927, c. 156) was adopted by the Dominion Parliament in 1927. Under the provisions of this statute the Dominion Government reimbursed each province participating in the Dominion scheme to the extent of one-half of the provincial expenditure for old age pensions. An amendment passed at the 1931 session of Parliament (c. 42, Statutes of 1931) provided that the Dominion contribution to the provinces be increased from 50 p.c. to 75 p.c. of the provincial disbursements for old age pensions. The Dominion contribution of 75 p.c. of provincial disbursements was made effective from Nov. 1, 1931; the provinces have since been reimbursed on this basis.

The Dominion Old Age Pensions Act is now operative in all provinces and in the Northwest Territories.

The Gold Commissioner of Yukon was given authority, by a Yukon Territorial Council Ordinance passed in 1927, to enter into an agreement with the Dominion Government for the purpose of obtaining the benefits of the Old Age Pensions Act for residents in the Territory. No proposed scheme of administration for adoption in Yukon has been submitted for the approval of the Governor in Council.

Sec. 5 of the Act provides that before any agreement is made with a province the scheme for the administration of pensions proposed to be adopted by the province shall be approved by the Governor in Council, and that no change in such scheme shall be made without the consent of the Governor in Council.

The qualifications required of an applicant for pension are set forth in Sec. 8 of the Act which reads as follows:—

> (1) Provision shall be made for the payment of a pension to every person who, at the date of the proposed commencement of the pension:—
>
> (*a*) is a British subject, or, being a widow, who is not a British subject, was such before her marriage;
> (*b*) has attained the age of seventy years;
> (*c*) has resided in Canada for the twenty years immediately preceding the date aforesaid;
> (*d*) has resided in the province in which the application for pension is made for the five years immediately preceding the said date;
> (*e*) is not an Indian as defined by the Indian Act;
> (*f*) is not in receipt of an income of as much as three hundred and sixty-five dollars ($365) a year; and
> (*g*) has not made any voluntary assignment or transfer of property for the purpose of qualifying for a pension.
>
> (2) The receipt of a pension shall not by itself constitute a disqualification from voting at any provincial or municipal election.

Sec. 9 provides that the maximum pension payable shall be $240 yearly, subject to reduction by the amount of the income of the pensioner in excess of $125 a year. The pension authority may accept a transfer of the pensioner's interest in a dwelling house in which he resides, in which case the value of the dwelling is not considered in calculating the amount of pension payable. Subject to certain conditions, the pension authority is entitled to recover out of the estate of any deceased pensioner the amount of pension payments with interest at 5 p.c. per annum, compounded annually.

Sec. 11 provides for the reduction of pension where a pensioner has resided for a portion of the 20 aforementioned years in a province with which no agreement has been made. Sec. 15 provides for the suspension of pension where a pensioner has transferred his residence to some place out of Canada. It is provided by Sec. 16 that a pension shall not be subject to alienation or transfer by the pensioner or to seizure in satisfaction of any claim against him.

The Governor in Council was empowered by Sec. 19 of the Act to make regulations pursuant to this section. Existing regulations were revised and approved by Orders in Council dated Dec. 9, 1937, and Feb. 3, 1938.

Table 27 is a financial summary of old age pensions in Canada as at the end of the calendar year 1938.

27.—Financial Summary of Old Age Pensions in Canada, by Provinces, as at Dec. 31, 1938.

Item.	Prince Edward Island. — Act effective July 1, 1933.	Nova Scotia. — Act effective Mar. 1, 1934.	New Brunswick. — Act effective July 1, 1936.	Quebec. — Act effective Aug. 1, 1936.	Ontario. — Act effective Nov. 1, 1929.	Manitoba. — Act effective Sept. 1, 1928.
Totals, pensioners as at Dec. 31, 1938..............No.	1,900	14,346	11,480	48,011	59,008	12,159
Averages, monthly pensions $	10·79	14·68	14·05	17·88	18·51	18·65
Percentages of pensioners to total estimated population, 1938[1].....................	2·02	2·62	2·58	1·51	1·58	1·69
Percentages of persons over 70 years of age to total population[1]...............	6·23	5·00	4·22	3·04	4·40	3·12
Dominion Government's contributions, Jan. 1 to Dec. 31, 1938..................$	175,702	1,856,026	1,416,521	7,606,547	9,549,666	1,989,005
Dominion Government's contributions from inception of Old Age Pensions Act to Dec. 31, 1938.........$	812,883	8,205,755	3,272,932	16,452,948	66,034,417	14,191,601

Item.	Saskatchewan. — Act effective May 1, 1928.	Alberta. — Act effective Aug. 1, 1929.	British Columbia. — Act effective Sept. 1, 1927.	Northwest Territories. — Order in Council effective Jan. 25, 1929.	Total.
Totals, pensioners as at Dec. 31, 1938.No.	12,167	10,142	12,291	8	181,512
Averages, monthly pensions............$	16·55	18·47	19·26	20·00	-
Percentages of pensioners to total estimated population, 1938[1].............	1·29	1·30	1·62	0·08	-
Percentages of persons over 70 years of age to total population[1]....................	2·35	2·36	3·59	1·21	-
Dominion Government's contributions, Jan. 1 to Dec. 31, 1938................$	1,805,731	1,636,517	2,043,919	1,984	28,081,618
Dominion Government's contributions from inception of Old Age Pensions Act to Dec. 31, 1938.......................$	12,804,029	9,291,779	13,460,071	14,527	144,540,942

[1] Estimates of population on which these figures are based are given at p. 113.

Pensions for Blind Persons.—By an amendment to the Old Age Pensions Act in 1937, provision was made for the payment of a pension to every blind person who, at the date of the proposed commencement of pension:—

(a) is, and continues to be so blind as to be unable to perform any work for which eyesight is essential;
(b) has attained the age of forty years;
(c) is not in receipt of a pension in respect of blindness under the Pension Act, or an allowance in respect of blindness under the War Veterans' Allowance Act;
(d) is:—
  (i) unmarried, or a widower without a child or children, or a widow without a child or children, and is not in receipt of an income of as much as four hundred and forty dollars a year, or—
  (ii) married, or a widower with a child or children, or a widow with a child or children and is not in receipt of an income of as much as six hundred and forty dollars a year; and—
(e) fulfils the conditions laid down in paragraphs *(a)*, *(c)*, *(d)*, *(e)* and *(g)* of Subsection 1 of Section 8 of the Act.

The maximum pension payable to a blind person is $240 yearly except in the case of a blind person, who, after the coming into force of the amendment to the Act, marries a person so blind as to be unable to perform any work for which eyesight is essential. The maximum pension in such a case is $120 yearly.

The amended Act provides that pensions payable to blind persons shall be subject to reduction as follows:—

(a) in the case of an unmarried person or a widower without a child or children or a widow without a child or children, by the amount of the income of the pensioner in excess of two hundred dollars a year;

(b) in the case of a married person or a widower with a child or children or a widow with a child or children, by the amount of the income of the pensioner in excess of four hundred dollars a year;

(c) in the case of a person married to a blind person receiving a pension under the amended Act, by the amount of the income of the pensioner in excess of two hundred dollars a year.

It is also provided that no blind person who is married, or is a widower with a child or children, or a widow with a child or children, shall be entitled to any pension in excess of the pension to which an unmarried person is entitled unless such married person and his or her spouse or such widower or widow and one or more of his or her children are living together.

The Governor in Council is empowered to make regulations with regard to pensions for blind persons and to define the expression "is so blind as to be unable to perform any work for which eyesight is essential".

28.—Financial Summary of Pensions for Blind Persons in Canada, by Provinces, as at Dec. 31, 1938.

Item.	Prince Edward Island. — Act effective Dec. 1, 1937.	Nova Scotia. — Act effective Oct. 1, 1937.	New Brunswick. — Act effective Sept. 1, 1937.	Quebec. — Act effective Oct. 1, 1937.	Ontario. — Act effective Sept. 1, 1937.	Manitoba. — Act effective Sept. 1, 1937.	Saskatchewan. — Act effective Nov. 15, 1937.	Alberta. — Act effective Mar. 7, 1938.	British Columbia. — Act effective Dec. 1, 1937.	Total.
Totals, pensioners....................No.	104	461	481	1,390	1,110	197	193	136	218	4,290
Averages, monthly pensions............$	13·99	18·93	19·59	19·39	19·50	19·40	19·83	19·63	19·82	–
Dominion Government's contributions, Jan. 1 to Dec. 31, 1938................$	7,923	65,020	71,909	246,534	180,279	30,650	27,833	12,921	30,326	673,395
Dominion Government's contributions from inception of amendment to Old Age Pensions Act....................$	7,923	65,646	72,627	254,856	186,572	31,010	27,833	12,921	30,326	689,714

Section 11.—The Co-operative Movement in Canada.

A general article on "The Co-operative Movement in Canada" appears at pp. 704-720 of the 1925 edition of the Year Book under the three sub-headings of "Consumers' Co-operation", "Co-operative Credit", and "Producers' Co-operation".[*] A digest of the latest material on each of these three subdivisions of co-operation follows, the presentation of producers' co-operation being confined to that among agricultural producers.

---

[*] The article referred to above was prepared for the Year Book by Miss Margaret Mackintosh, M.A., of the Department of Labour, Ottawa.

The Co-operative Union of Canada was formed in 1909, with six affiliated societies and 1,595 members. In 1937, 57 societies reported to the Union, their membership being 162,801 . The sales of the reporting societies totalled $13,171,020 and the purchase dividends returned to their members amounted to $216,187. The classes of co-operative activities covered included retailing, wholesale trading, marketing, dairying, transportation societies, and buying clubs.

Since October, 1909, the Union has published a monthly, *The Canadian Co-operator*, from which these statistics and those in Subsection 1 have been taken.*

Subsection 1.—Consumers' Co-operation.

The statistics in Table **29**, which cover only those retail societies reporting to the Co-operative Union of Canada, cannot be considered as strictly comparable due to the fact that, should a large society fail to report in any one year (and this has frequently happened in the past), an apparent decrease in the activities of the societies, not in line with actual conditions, would result.

The following notes, covering membership only, will help the reader to judge the real trend of consumers' co-operative activity. The increase of 624 in 1932 was due, in part, to the failure of 2 existing societies to report in 1931, although 3 new societies reported a membership of 583. Of the total increase of 1,354, in 1933, 1,058 was due to the reporting, for the first time, of 4 societies which had been in existence from 2 to 5 years, while one new society reported 57 members. In 1934, the apparent increase of 418 is modified by the fact that it includes 210 members of a society not reported in 1933, while one new society, with 44 members, reported in 1934. In 1935 the situation was complicated, since 6 societies which reported in the previous year failed to do so in 1935, their 1934 membership having totalled 736—on the other hand, 2 previously-existing societies, which did not report in 1934, reported 177 members and 3 new societies reported 525 members; as these two factors almost balance, it would appear that the existing societies increased their membership by nearly 600. In 1936, three new societies reported a membership of 461, while those established societies which reported in both 1935 and 1936 showed an increase in membership of 1,022; in addition, six buying clubs in Quebec and Ontario reported a membership of 739. In 1937, the 38 societies which also reported in 1936 showed an increase in membership of 1,839; five societies which did not report in 1936 had a membership of 1,467, of these, 3 were new organizations with 474 members. Three societies, with 638 members, reported in 1936 but not in 1937.

---

* For details regarding the Co-operative Union of Canada and its activities, see the 1925 Year Book, pp. 708-709.

29.—Statistics of Retail Co-operative Societies Affiliated with the Co-operative Union of Canada, 1931-37.

Year.	Societies.	Members.	Share and Loan Capital.	Reserve Funds.	Stock in Trade.	Other Assets.	Sales.	Net Profits.	Purchase Dividends Paid.
	No.	No.	$	$	$	$	$	$	$
1931....	23	8,122	574,450	449,467	455,986	955,347	2,874,746	185,116	147,175
1932....	27	8,746	536,245	436,184	443,424	829,866	2,631,515	117,895	111,130
1933....	31	10,100	504,623	360,784	443,489	638,138	2,719,212	106,434	80,220
1934....	33	10,518	515,369	370,388	479,574	728,404	3,353,884	117,722	91,784
1935....	34	11,116	573,957	372,732	503,004	877,634	3,876,195	161,113	130,518
1936....	41	13,696	637,012	365,925	585,240	891,053	4,445,339	209,379	163,952
1937....	45	16,364	809,468	415,703	670,296	1,152,963	5,041,328	229,270	182,790

Subsection 2.—Co-operative Credit in Quebec.

A form of co-operation which has achieved great success is that which provides short-term credit for small farmers and industrial workers in the province of Quebec. In 1900, what are known as "Les Caisses Populaires", or People's Banks, were begun with the establishment, by the late Alphonse Desjardins, of La Caisse Populaire at Lévis. M. Desjardins adopted the following principles: lending money only for approved purposes to carefully selected members in a restricted area; limited liability; issuing shares of small amount payable by instalments and withdrawable; and distribution of profits. These banks are for the most part established in agricultural districts. Loans are made to purchase agricultural implements at cash prices, to increase farm live stock, to improve farm buildings, to tide over a period of depression, to pay off a merchant, and for various similar purposes. The loans, though comprised within the term 'short credit', are for longer periods than are usual in ordinary commercial transactions because agricultural operations necessarily extend over longer periods than those of trade. They may be for 12, 15, or even 24 months, because they must give time for the farmer to realize on his products.

Details of organization may be found in the Statistical Year Book of Quebec, in the 1936 edition of which may be found statistics of the system as a whole. Complete information of the working of each individual bank, including such details as number of members and depositors, rates of interest paid, loans made and profits realized, classification of size of loans, receipts and expenses and a résumé of chief operations from the date of organization to 1937, for those banks operating in the latter year, are published in the report entitled "Co-operative People's Banks and Co-operative Agricultural Societies".

Table **30** shows the progress of these banks by quinquennial years from 1915 to 1930 and annually since then.

30.—Progress of Co-operative People's Banks in Quebec, 1915, 1920, 1925, and 1930-37.

Year.	Banks Reporting.	Members.	Depositors.	Borrowers.	Loans Granted.	Value of Loans Granted.	Profits Realized.
	No.	No.	No.	No.	No.	$	$
1915	91	23,614	13,696	6,728	8,983	1,483,160	89,893
1920	113	31,752	26,238	9,213	15,390	4,341,544	311,323
1925	122	33,279	33,527	9,384	13,682	3,909,790	449,531
1930	179	45,767	44,940	14,278	18,857	3,724,537	645,096
1931	174	43,641	43,207	13,240	16,203	2,998,046	594,235
1932	168	40,933	40,201	12,363	13,283	2,157,886	531,765
1933	162	36,470	37,683	10,784	11,407	1,682,551	452,220
1934	190	38,811	39,723	11,230	11,295	2,141,762	441,876
1935	202	43,045	42,856	11,987	12,175	2,803,748	472,543
1936	234	49.890	49,796	13,453	13,974	3,370,821	459,601
1937	256	57,216	56,493	15,576	17,639	4,310,777	519,714

Subsection 3.—Agricultural Co-operation in Canada in 1937.*

Canadian farmers have been accustomed to the idea of mutual assistance since the days of early settlement as evidenced by barn raisings, beef rings, threshing syndicates, and the exchange of labour for various types of farm work. Isolated groups have been in business for some time but in the past thirty years the number of such organizations has increased rapidly. Available statistics for 1937 show 1,217 active farmers' business organizations with a total turnover of $155,080,435.

---

* Prepared by W. F. Chown, Division of Economics, Marketing Service, Department of Agriculture.

These associations have been organized by farmers and are operating for their mutual benefit. They have been brought into being in order to obtain better price terms through increased bargaining power or to provide some service not at present available or to improve some existing service considered inadequate.

In Canada the expansion of co-operative activity has taken place most rapidly and to the greatest degree in the marketing field. Presumably this field has offered the greatest opportunity to effect savings and to provide needed services. Collective action has also made possible the pooling of the proceeds received from the sale of agricultural products of the same grade and quality and the return to the farmers of an average price for such products. This has frequently implied better grading and preparation for market while the products are still in control of the producers than would otherwise have been the case. The value of farm products marketed amounted to $134,493,746 for the crop year ended July 31, 1938.

Many associations formed primarily for marketing have found it possible to render an additional service to their members by utilizing the buying power already mobilized for the purpose of purchasing supplies needed on the farm. For example, fruit-marketing associations may buy fertilizers, spray material, barrels, boxes, flour and feed, and general merchandise for their fruit-growing members. A number of associations have been formed primarily for the purpose of buying supplies, usually bulk commodities, and some are operating stores carrying a full line of general merchandise. Over half of this type operates in the Prairie Provinces and the principal commodities handled are gasoline, tractor fuel and other petroleum products, coal and wood, and binder twine. Sales of supplies and merchandise amounted to $20,091,893 for the crop year 1937-38 or about 15 p.c. of the value of farm products marketed.

In order to increase effectiveness, sales agencies have been formed on a regional basis or Dominion-wide commodity basis such as the Canadian Co-operative Wool Growers, Limited, and the Canadian National Silver Fox Breeders' Association. Wholesale societies are also operating in most of the provinces which consolidate the buying power of the local associations and augment the benefits to be obtained from quantity buying. The United Farmers of Ontario, Limited, and the Coopérative Fédérée de Québec combine the functions of sales agency and wholesale for their affiliated local associations.

Fruits, vegetables, grain, seed, eggs, poultry, wool, and furs are usually graded and otherwise prepared for market before being offered for sale. Elevators, stockyards, common and cold-storage warehouses, and chick hatcheries are owned and operated co-operatively. Butter and cheese are manufactured, chicken and apple products are canned, commercial feeds and spray materials are prepared in co-operative plants. The First Co-operative Packers of Ontario, Limited, process hogs into bacon and other pork products. The Consumers' Refineries Co-operative Association, Limited, Regina, refine crude oil into gasoline, distillate, and other petroleum products.

In 1908 the Nova Scotia Legislature passed the Farmers' Fruit Produce and Warehouse Associations Act and in the same year the Quebec Legislature enacted the Co-operative Agricultural Associations Act. Since that time each province has provided for the incorporation of co-operative associations by suitable legislation. Since 1932, five provinces have enacted new co-operative associations

Acts and in three provinces there have been extensive amendments or consolidations. Such legislation varies between provinces but in most cases interest on capital is limited and profits are required to be distributed to members on the basis of patronage. There is no Dominion co-operative Act but several farmers organizations have been incorporated under the Dominion Companies Act. Others have been incorporated by special Acts of the Dominion Parliament and provincial legislatures. Over 90 p.c. of the associations reporting are incorporated by one or other of these means but many have not achieved such status and are buying or shipping clubs or circles.

The Provincial Governments have set up machinery to further the cause of co-operation usually within their Departments of Agriculture and in connection with marketing. The Agricultural Economics Branch was established within the Dominion Department of Agriculture in 1929 and one phase of its work has been the study of the farmers' co-operative movement. Under joint agreements with the Provincial Governments, a survey of existing organizations was undertaken in 1931 and has been maintained annually since that date.

The number of associations reporting to the Economics Division has shown an increase in each of the seven years since the survey was started. The total business for the year increased from 1932-33 to a peak in 1936-37 of $173,927,117. The total business for the year 1937-38 amounted to $155,080,435, a decrease of $18,846,682 from the previous year. In 1937 Saskatchewan suffered extremely from drought and the estimated value of grain handled by the Saskatchewan Co-operative Wheat Producers, Limited, dropped from $56,000,000 in 1936-37 to $15,000,000 in 1937-38, a decrease of $41,000,000. Therefore, the business of other co-operatives increased by about $22,000,000. A scrutiny of the results of individual associations reveals that this gain was quite widespread and that, in general, business was good.

In addition to the trading associations described above and for which statistics are given in Table **31**, farmers are interested in other forms of co-operative activity.

A mutual fire insurance company was formed in Ontario as early as 1836 and several, still functioning as farmers' mutuals, were organized between 1850 and 1860. To-day there are about 350 such companies with net assets of over $5,000,000 and insurance at risk amounting to over $1,000,000,000. These have a long history of successful operation behind them.

Approximately 62,000 or 5 p.c. of the telephones in Canada are operated by rural co-operative companies in which there is a total investment of $19,193,394.

Inspired by the example of Quebec, 6 other provinces have passed co-operative credit union legislation within recent years, and societies have been formed for the purpose of making credit available to members. A number of these have been formed in rural communities.

Societies have been formed by fishermen on both coasts for the purpose of canning and marketing fish and buying gear on the co-operative plan. As many of the members of these societies are also farmers, mention may well be made of this activity in a summary of agricultural co-operation. During 1937, 16 fishermen's co-operative societies in Nova Scotia with a membership of 760 did business amounting to $251,114 and had on hand, at the end of the year, assets amounting to $67,976.

31.—Farmers' Co-operative Business Organizations in Canada, crop year ended July 31, 1938.[1]

Province or Function.	Associations.	Places of Business.	Shareholders or Members.	Patrons.	Total Assets.	Value of Plant.	General Liabilities.	Paid-Up Share Capital.	Reserves and Surplus.	Sales of Farm Products.	Sales of Supplies.	Total Business, Including Other Revenue.
	No.	No.	No.	No.	$	$	$	$	$	$	$	$
					PROVINCIAL GROUPING.							
Prince Edward Island	15	70	10,291	11,003	74,262	32,069	25,073	10,800	38,389	1,197,784	170,032	1,370,553
Nova Scotia	99	99	7,444	11,802	1,792,095	655,889	1,003,219	395,859	393,017	1,745,205	1,732,176	3,499,358
New Brunswick	45	68	3,808	10,004	404,439	124,647	286,773	93,390	24,276	1,143,339	521,667	1,666,837
Quebec	451	891	50,355	39,980	5,416,519	2,054,097	3,395,097	907,772	1,113,740	11,160,106	4,392,800	15,641,666
Ontario	145	173	35,937	44,150	3,497,066	1,369,954	1,379,714	1,061,956	1,055,396	16,655,664	4,136,008	20,836,171
Manitoba	38	334	42,436	46,328	4,612,137	2,483,480	3,793,159	283,230	535,748	19,130,864	895,128	20,078,430
Saskatchewan	327	1,429	170,381	162,678	38,239,997	16,190,716	12,660,128	1,227,641	24,352,228	21,107,445	3,582,654	24,810,344
Alberta	37	537	61,810	70,691	15,476,156	5,725,108	5,346,227	419,975	9,709,954	33,293,509	885,240	34,251,273
British Columbia	54	61	12,915	16,621	4,100,677	1,308,470	1,574,676	1,557,040	968,961	8,062,848	2,032,840	10,175,420
Interprovincial	6	463	40,152	49,680	9,527,349	6,625,554	3,959,631	3,307,728	2,259,990	20,996,982	1,743,348	22,750,383
Totals	**1,217**	**4,125**	**435,529**	**462,937**	**83,140,697**	**36,569,984**	**33,423,607**	**9,265,391**	**40,451,699**	**134,493,746**	**20,091,893**	**155,080,435**
					FUNCTIONAL AND COMMODITY GROUPING.							
Marketing—												
Dairy products	166	593	58,672	77,824	5,169,009	2,397,338	2,172,812	2,140,132	856,065	19,004,148	318,328	19,420,505
Fruits and vegetables	94	128	11,066	14,007	4,181,551	1,861,155	2,320,579	727,389	1,133,583	8,278,176	1,708,058	10,077,112
Grain and seed	36	2,155	190,593	190,744	63,226,753	29,474,424	23,995,379	3,454,955	35,776,419	80,888,969	1,608,762	82,522,611
Livestock	177	206	59,430	54,225	1,114,958	563,234	335,695	651,281	127,982	18,913,484	465,710	19,425,605
Poultry	61	286	32,342	25,387	442,504	109,884	155,068	60,269	227,167	3,146,091	80,272	3,236,173
Honey	3	3	1,401	725	168,554	2,779	126,761	30,139	11,654	202,873	Nil	202,873
Maple sugar	2	2	1,982	1,982	321,155	248,069	92,934	57,762	170,459	668,243	"	668,243
Tobacco	5	5	979	753	465,754	147,019	68,326	80,719	316,709	511,581	"	513,410
Wool	1	17	8,000	7,000	333,593	69,725	162,833	117,140	53,620	649,183	62,819	713,603
Fur	2	2	1,100	4,950	42,479	4,881	4,540	[2]	37,939	1,638,865	22,742	1,662,552
Miscellaneous[3]	7	19	20,425	20,425	3,535,526	692,193	2,617,819	620,780	296,927	161,379	Nil	162,038
Totals, Marketing	554	3,416	385,990	398,022	79,001,836	35,570,701	32,052,746	7,940,566	39,008,524	134,062,992	4,266,691	138,604,725
Purchasing	646	692	49,013	64,381	3,953,225	907,342	1,293,053	1,236,192	1,423,980	430,754	15,412,253	16,050,600
Miscellaneous	17	17	526	534	185,636	91,941	77,808	88,633	19,195	Nil	412,949	425,110
Grand Totals	**1,217**	**4,125**	**435,529**	**462,937**	**83,140,697**	**36,569,984**	**33,423,607**	**9,265,391**	**40,451,699**	**134,493,746**	**20,091,893**	**155,080,435**

---

[1] Not including co-operative insurance companies, credit societies, telephone co-operatives, and farmers' institutes. [2] Not organized on a share-capital basis.

[3] Includes assets and liabilities of United Farmers of Ontario, Ltd., and Coopérative Fédérée de Québec but business has been distributed according to commodity groupings.

Section 12.—Labour Legislation in Canada in 1938.

A summary of the labour laws in force in Canada at the end of the year 1937 is given in the Canada Year Book for 1938 at pp. 787-796. Legislation enacted during 1938 is published in the Report on Labour Legislation in Canada, 1938, issued by the Department of Labour. A résumé of the principal enactments and regulations follows.

Dominion Legislation.—Regulations of Dec. 14, 1938, under the Canada Shipping Act, give effect to the draft convention of the International Labour Conference for the protection against accidents of workers employed in loading and unloading ships.

In Chapter XXX, Section 1, there appears a summary of Dominion legislation enacted in 1938. Under the sub-heading "Labour", the Unemployment and Agricultural Assistance Act, the Shop Cards Registration Act, the National Housing Act, and Municipal Improvements Assistance Act are summarized. The interested reader is referred to those references for details.

The Income War Tax Act was amended to exempt from taxation one-tenth of any lump sum payable by an employer on account of an employee's superannuation scheme for each of the first ten years after the establishment of such a scheme.

Provincial Legislation.—In Quebec, an Act to Facilitate the Exercise of Certain Rights enables a trade union to be sued by summoning one of its officers or by summoning the group collectively. The Act applies to any group of persons associated for carrying out any purpose of an industrial, commercial, or professional nature which does not possess a legal personality and is not a partnership within the meaning of the Civil Code.

Trade Unions.—The Saskatchewan Freedom of Trade Union Association Act, the Industrial Conciliation and Arbitration Act of Alberta, and the Labour and Industrial Relations Act of New Brunswick recognize the right of employees to organize for any lawful purpose and to bargain collectively with their employers. The Alberta statute repeals the Freedom of Trade Union Association Act, 1937. In Alberta and New Brunswick the Acts stipulate that bargaining may be conducted through representatives of employees elected by a majority vote of the employees affected, and in New Brunswick and Saskatchewan through trade union officers. In the three provinces penalties are provided for any employer who seeks to prevent an employee from joining an association. In Saskatchewan and Alberta every trade union must file its constitution and by-laws with the Government and in New Brunswick it may be required to do so. In Quebec identical clauses inserted in the Collective Labour Agreements Act and the Fair Wage Act make liable to a penalty any person who prevents or attempts to prevent an employee from becoming a member of an association or who dismisses or tries to have dismissed any person on the ground that he is or is not a member of an association.

Conciliation.—The above-mentioned Alberta and New Brunswick statutes provide for conciliation in industrial disputes and, if conciliation fails, for investigation and report by a board consisting of one representative of each party and an independent chairman. The question of acceptance of the board's award is to be submitted to a separate vote of employers and employees, the voting to be by secret ballot. In New Brunswick strikes and lockouts are prohibited unless the dispute has been referred to a conciliation board and the parties have voted on its recommendations or unless the matters in dispute have been dealt with by the Fair Wage

Board. The Alberta Act prohibits a strike or lockout during the period between application for a conciliation commissioner and 14 days after the date fixed for the vote. The New Brunswick Act repeals the Fair Wage Act, 1936, but re-enacts most of its provisions.

The British Columbia Industrial Conciliation and Arbitration Act is amended to provide that if the majority of the employees of an employer were, on Dec. 7, 1938, organized in a trade union, it is lawful for them to bargain collectively through the officers of the union. In other cases collective bargaining is to be conducted as formerly through duly elected representatives of the employees affected.

Wages.—In Quebec the title of the Workmen's Wage Act, 1937 (a revision of the Collective Labour Agreements Extension Act, 1934) is again changed to Collective Labour Agreements Act. Amendments in this statute and in the Fair Wage Act enable the Lieutenant-Governor in Council to amend or revoke a wage ordinance or a decree making an agreement binding or to make either of them retroactive for not more than four months. Unless there is an express stipulation to the contrary, no decree or ordinance is to apply to any department of the Government of Quebec or to work done by a third party for the Government under a contract providing for a scale of minimum wages.

An amendment in the Alberta Industrial Standards Act clarifies the points which may be dealt with in a schedule of wages and hours to be made binding under the Act. Both the employer and employee who make an agreement for wages below the legal minimum are liable to a penalty. So also is an employer who discharges or discriminates against an employee for making a complaint or testifying in an inquiry under the Act. In Saskatchewan an amendment in the Industrial Standards Act stipulates that before a schedule of wages and hours is made binding the Minister must be satisfied that it is agreed to by a majority of the employees affected and by employers representing a major part of the volume of business in the industry affected. Another amendment authorizes the fixing of minimum prices for services in the same way as wages and hours.

The Manitoba Fair Wage Act is extended to barbering, hair-dressing, printing, engraving, dry cleaning, and any other industry that may be included by Order in Council. Minimum wages and maximum hours in these industries may be fixed by the Fair Wage Board as in the case of public works or they may be established in a manner similar to that provided in the Industrial Standards Acts of Alberta, Nova Scotia, Ontario, and Saskatchewan.

New sections added to the Alberta Male Minimum Wage Act authorize the Board of Industrial Relations, with the approval of the Lieutenant-Governor in Council, to prescribe fair wages for any class of workmen in any specified industry, trade, or occupation (except farm labourers and domestic servants) or in any specified area, work, or undertaking throughout the province. The prescribed rate is to be payable where the contract for the work contains a clause requiring the payment of fair wages and also in cases where the rate is not fixed in the contract of employment.

The Alberta Mining Industry Wages Security Act, which replaces the Coal Miners' Wages Security Act, applies to quarries, salt mines, and works for processing salt or tar sands, and to drilling for gas and oil as well as to coal mines. Every employer, before engaging in such an industry and thereafter when required, must furnish the Minister with a statement of his assets and liabilities and, annually, with a statement of wages paid. Other sections of the Act which will come into force on proclamation require employers to deposit security for wages for the ensuing twelve months, and to keep posted notices that such security has been furnished. Monthly returns as to the wages paid are stipulated.

The special tax imposed on wages under the Income Taxation Act of Manitoba is reduced from 2 to 1 p.c.

Hours of Labour.—An amendment to the Alberta Hours of Work Act, defines "overtime" as time worked in excess of nine hours a day or 48 hours a week for a female employee, and ten hours a day or 54 hours a week for a male employee. In Manitoba, the Highway Traffic Act now prohibits a driver being on duty as driver for more than nine consecutive hours, except in emergency due to breakdown of the vehicle, or on duty in any capacity for more than 12 hours in any twenty-four or on more than six days a week. The British Columbia Fire Departments Two-Platoon Act is extended to every municipality and place in which there is a paid fire department or brigade.

Workmen's Compensation.—The Workmen's Compensation Acts of Alberta and Nova Scotia are revised and amendments are made to those of British Columbia, New Brunswick, Ontario, Quebec, and Yukon. The revised Act of Alberta implements certain recommendations of a committee of the Legislature. The Board has no longer power to exclude industries from the Act. To aid in equalizing assessments, any excess of payments over receipts in the Medical Aid Fund are to be charged to the Accident Fund and any surplus in the latter may be transferred to an equalization reserve. The deductions that may be made from wages towards the cost of medical aid may not be less than 1c. or more than 5c. per day or part of day worked. Other changes provide for compensation at the rate of 100 p.c. of earnings to workmen injured while doing rescue work in a mine, payment of compensation for the first three days if the disability lasts more than 30 days, and for payments in respect of children up to the age of 18 years. In cases of permanent partial disability the Board is to estimate the impairment of earning capacity and award compensation accordingly. Municipalities must make annual returns to the Board regarding employers of labour within their borders. Where an accident is due to the employer's failure to comply with the directions or regulations of the Board, a special levy may be made upon the employer not exceeding one-half of the compensation payable in respect of the accident.

The Nova Scotia Workmen's Compensation Act is chiefly a revision of existing legislation. Travelling salesmen are brought within the scope of Part I and the Board is authorized to pay compensation for a permanent partial disability even if the workman is not totally disabled for seven days. Accounts for medical aid must be submitted within one year.

In British Columbia the scale of benefits is raised. Burial expenses are now payable up to $125 and compensation to a widow or invalid widower is increased to $40 per month. The maximum total compensation is raised to $70 per month in cases where there is a widow or invalid widower with children, or dependent parents in addition to a widow or invalid widower or orphan children. Compensation for disablement is increased to $66\frac{2}{3}$ p.c. of average earnings. Surplus funds accumulated owing to the lower rate of benefit paid to alien dependants residing outside of Canada are to be used to increase payments to dependent widows and children in certain cases.

Radio broadcasting stations are brought under Part I of the Act in New Brunswick and the Board is empowered to re-admit industries which it has excluded by regulations and to require employers to file statements giving the names and addresses of employees, their hours, wages, and duties, and any other information that may be required.

Two statutes amend the Workmen's Compensation Act of Quebec. The first empowers the Lieutenant-Governor in Council to appoint an officer to administer the Accident Fund and a medical board of three members to review the medical evidence. The other Act brings within the scope of the principal Act infectious silicosis and the similar condition resulting from inhalation of dust from asbestos.

In Ontario provision is made for the payment of an additional sum, not exceeding $125, for necessary expenses of transferring the body of a workman from the place where death occurs to the place of interment in Ontario.

An amendment in the Workmen's Compensation Ordinance of Yukon extends from six months to twelve, the maximum period during which compensation for temporary disability may be paid.

Safety Measures.—The Ontario Department of Labour Act is amended to authorize regulations *re* the construction of coffer dams and crib work and amendments are made in the Nova Scotia and British Columbia Coal Mines Regulation Acts, the New Brunswick Mining Act, the Steam Boilers Act of Saskatchewan, and power is given to the British Columbia Public Utilities Commission to make regulations for safety and health. In Nova Scotia there are new rules for the use of machinery and the amount of combustible matter permitted in the dust of a mine which is not naturally wet or treated with water is reduced from 50 to 35 p.c.

In British Columbia coal miners may select one of their number to inspect, with the mine manager or inspector, the scene of an unusual occurrence or fatal accident.

In New Brunswick the Act contains new rules for timbering and the use of explosives, and requires any person in charge of a working face to have had at least one year's experience underground and to hold a certificate of a specified character. Power is given to an inspector to enter a mine at any time and, by written order, to require the discontinuance of any dangerous practice or condition.

In Saskatchewan the Canadian Interprovincial Regulations for the construction and inspection of boilers and machinery may be adopted with or without change as regulations under the Steam Boilers Act. Certain amendments are made in the recognized qualifications laid down for engineers.

Unemployment.—In Alberta and Saskatchewan, statutes providing for cooperation with the Dominion Government in dealing with unemployment are continued in force for another year, and the Unemployment Relief Loan Act of Manitoba, which authorizes the raising of loans for relief purposes, is also extended until 1939; provision is made that relief expenditures might be met from the Consolidated Revenue Fund as well as by loan.

In Alberta provision is made in the Bureau of Relief and Public Welfare Act for committees of not more than three members to investigate relief problems presented to the Agricultural Committee on Relief. The section requiring a municipality to provide relief in urgent cases for persons who are not residents but who are living there temporarily applies now only to employable persons.

In British Columbia, an amendment to the Residence and Responsibility Act enables a person who has moved from one local area to another to be granted, by the latter area, unemployment or poor relief or other social assistance on the same terms as residents. Unless the regulations provide to the contrary, the costs of such assistance are to be paid by the area of which the person is a resident.

The Nova Scotia Labour Act, 1933, was continued in force until May 1, 1939. This Act forbids any person or corporation employing 25 or more workers to hire any person who has not been a resident of Nova Scotia for at least one year, unless the person hired produces a certificate from the Government Employment Agent or Municipal Clerk in the place where he is to be employed stating that there are no unemployed persons in such place capable of doing and willing to do the work.

The Youth Aid Act of Quebec enables agreements to be made by the Provincial Government with any person, corporation, institution, or government to assist young persons to establish themselves in suitable employment and authorizes a maximum expenditure of $1,000,000 for this purpose. Provision is also made for agricultural, mining, and textile schools, and for the study of fisheries.

The British Columbia Apprenticeship Act is amended to regulate the employment of minors 16 years of age or over in trades to which the Act applies.

Vocational training may be provided under the Manitoba Public Schools Act and pupils placed under the instruction of any person engaged in trade or industry. Liability of the School District for any injury to such pupils is limited by the Act. The person giving the instruction and his agents are also free from liability unless their negligence or misconduct contributes to the injury or death.

The Trade Schools Regulation Acts of Ontario and Manitoba are to come into force on proclamation. Both laws will require such schools to be registered and inspected. Before issuing a certificate of registration, which must be renewed each year, the Minister must be satisfied that the school has competent instructors and sufficient equipment, and is furnishing proper instruction at reasonable rates. Regulations may prescribe minimum hours of instruction and maximum fees, and designate any vocation as a trade within the meaning of the Act.

Superannuation and Old Age Pensions.—The Municipal Superannuation Act of British Columbia, repeals the Act of 1921, and provides for a contributory pension scheme applying: *(a)* to certain employees, except pensionable teachers, of municipalities and school boards that have adopted the provisions of the former Act or that adopt those of the new statute by a two-thirds majority of the Council or Board; *(b)* to permanent employees of certain municipal boards; and *(c)* to hospital employees (except casual workers to whom the Act is declared to apply by the Provincial Secretary on the joint request of the hospital and a majority of its employees). Provision is made for revising allowances granted under the earlier statute to bring them into line with the new Act and for a superannuation fund made up of contributions from employers and employees. Male employees, other than policemen and firemen, are entitled to pensions at the minimum retiring age of 60 or the maximum of 65 years. Policemen, firemen, and women employees are pensionable at the minimum of 55 or the maximum of 60 years.

The Alberta Old Age Pensions Act is amended to bring blind persons over 40 years of age within its scope in accordance with the Dominion Old Age Pensions Act.

Section 13.—Legislation Respecting Combinations in Restraint of Trade.

A general article on Canadian legislation concerning combinations and monopolies in restraint of trade appears in the 1927-28 Year Book under the heading "Legislation Respecting Combinations in Restraint of Trade", pp. 765-770. In each later issue of the Year Book an annual statement on proceedings under the Combines Investigation Act is included.

The first Dominion legislation in this field was "An Act for the Prevention and Suppression of Combinations Formed in Restraint of Trade", passed in 1889 and now in force in amended form as Sec. 498 of the Criminal Code. Legislation providing special facilities for the investigation of combines was first enacted in 1907 and was included in the Customs Tariff of 1907. In 1910 the Combines Investigation Act of that year was enacted. The latter Act was replaced by the Combines and Fair Prices Act, 1919, which, in turn, after declaration of its constitutional invalidity by the Judicial Committee of the Privy Council, was replaced by the present Combines Investigation Act in 1923 (R.S.C. 1927, c. 26).

The Combines Investigation Act.—This Act provides means for the investigation of trade combinations, mergers, trusts, and monopolies alleged to have operated in restraint of trade and to the detriment of the public. The Act was amended in 1935 and 1937. In 1931 its constitutional validity was upheld by the Judicial Committee of the Privy Council following a reference of questions on this point by the Governor in Council to the Supreme Court of Canada. The Combines Investigation Act provides for publication of reports of investigations of alleged combines. Participation, or knowing assistance, in the formation or operation of combinations or monopolies, that are detrimental to the public and come within the scope of the Act, is an indictable offence. Provision also is made in the Act for the reduction or removal of customs duties, at the instance of the Governor in Council, in cases where it is found that, with respect to any commodity, there exists any combine to promote unduly the advantage of manufacturers or dealers at the expense of the public, and that such disadvantage to the public is facilitated by existing customs duties.

Investigations in 1938.—An investigation into an alleged combine in the distribution of tobacco products in the province of Alberta and elsewhere in Canada was made during the year. The finding of the Commissioner in a report submitted on Aug. 31, 1938, was that a combine existed in the distribution of tobacco products. The report was referred to the Attorney General of Alberta, and charges were laid against 44 tobacco companies and distributors. Court proceedings in this case were pending at the end of the year.

During the year an investigation was instituted to determine whether a combine exists in connection with the manufacture and sale of corrugated and solid fibreboard boxes and related products. The investigation extended over into the early part of 1939. Another investigation commenced in 1938 and not completed at the end of the year was an inquiry into the distribution of fruits and vegetables produced in British Columbia.

Investigations made during 1938, in addition to those mentioned above, have covered a wide variety of products and of trade practices, and have dealt with complaints in connection with classes of trade including manufacturing, primary production, wholesaling, and retailing. Steps to deter and prevent undue price enhancements by combinations or monopolies, unreasonable practices for the elimination of competitors, and other detrimental restraints of trade, have been taken along lines designed to be preventive where possible.

Section 14.—Mothers' Allowances.

Seven of the nine provinces of Canada provide for the payment of allowances to mothers who are widowed or without adequate means of support. The province of Manitoba was the first to make such provision in 1916, and the example has been followed by the other western provinces and by Ontario, Nova Scotia, and Quebec.

The Mothers' Allowances Act, 1930, of New Brunswick has not been proclaimed in effect.

All the mothers' allowances Acts stipulate that the mother must be a resident of the province at the time of making application and a widow or, in all provinces but New Brunswick and Nova Scotia, a wife whose husband is mentally incapacitated. In each case the applicant must also be a resident of the province at the time at which death, incapacity, or desertion occurs. Under all the laws, except those of New Brunswick, Nova Scotia, and Quebec, the wife of a physically disabled man is eligible but the section in the Alberta Act relating specifically to such persons has not been proclaimed. In British Columbia allowances are paid in cases where total disability is expected to continue for one year or more.

In Alberta, British Columbia, Ontario, and Saskatchewan, 'deserted'* wives are paid an allowance, and in British Columbia and Saskatchewan, the wives of inmates of penal institutions are eligible. Under all the statutes except those of Alberta and Saskatchewan, the mother must be a British subject, or the widow or wife of a British subject. Allowances may be paid to foster-mothers under certain conditions in all the provinces but Alberta, Nova Scotia, and New Brunswick.

In New Brunswick, Nova Scotia, and Quebec, allowances are payable in respect of two or more dependent children, but in New Brunswick and Nova Scotia an allowance is payable for one child under 16 if there is an invalid child over 16 years of age. In the other provinces, allowances are payable in respect of one or more dependent children, but in Manitoba, under the regulations, no allowance is payable in respect of an only child, or an only child under 15 years of age, unless the mother is temporarily or permanently unable to care for the child. In British Columbia, New Brunswick, Nova Scotia, Ontario, Quebec, and Saskatchewan a dependent child is a child under 16 years of age. In Alberta, a boy under 15 or a girl under 16 is deemed to be dependent. In Manitoba, only children under 15 are regarded as dependent unless they are invalids.

In Alberta the cost of the allowances is divided between the province and the municipalities concerned, and in the other provinces the whole cost is carried by the province.

Rates of Allowances.—In British Columbia, the Act provides for a maximum monthly allowance of \$42·50 for a mother with one dependent child, an additional \$7·50 for each child under 16 years of age, and a further \$7·50 in cases where the husband of the mother is totally disabled and is living with her. In New Brunswick and Nova Scotia, a maximum allowance of \$60 per month is fixed by statute. In the other provinces, the provincial authority administering the Act has power to fix the rate of the allowance. In Ontario, the maximum for a mother and one child is \$35 per month in a city, \$30 in a town of over 5,000 population, and \$25 in a rural district, with an additional \$5 for every child in each case. In Saskatchewan, under the terms of an Order in Council of January, 1936, maximum monthly payments range from \$8 to a mother with one child to \$44 to a mother with ten or more children.

In Manitoba, the maximum allowance for a mother and two children is \$50 excluding allowance for winter fuel, with a maximum of \$89 for a family of seven or more children. In Alberta, the allowance is determined by the special circumstances in each case, the maximum payment ranging from \$25 per month to a mother with one child, to \$50 per month where there are five children.

---

* In Ontario presumption of death after complete disappearance of the husband for 3 years is interpreted as desertion. In Saskatchewan death may be presumed after 7 years, while in Alberta and British Columbia pensions may be paid after desertion for 5 and 2 years, respectively.

Tables 32 to 37 show, for six provinces, the numbers of families and of children assisted, the total benefits paid, and in some cases the division of the cost of the latter between provinces and municipalities, for as many years as comparable figures are available.

Nova Scotia.—The Mothers' Allowances Act (c. 4, 1930) was passed at the session of 1930 and came into force on Oct. 1, 1930. Table 32 shows the numbers of families assisted and the amounts paid under the Act from its inception to Nov. 30, 1938.

32.—Mothers' Allowances in Nova Scotia, fiscal years 1931-38.

Fiscal Year.	Numbers Assisted.		Benefits Paid.
	Families.	Children.	
			$
1931 (year ended Sept. 30)	1,030	3,179	310.602
1932 " "	1,108	3,342	331,337
1933 " "	1,158	3,487	341,929
1934 " "	1,168	3,549	356,075
1935 (14 months ended Nov. 30)	1,239	3,720	413,997
1936 (year ended Nov. 30)	1,222	3,630	363,981
1937 " "	1,260	3,682	389,212
1938 " "	1,295	3,713	412,745

Quebec.—The first regulations under the 1937 Act providing for mothers' allowances have been made. Procedure has been defined for application, which must be made either to the Bureau administering the Act under the Minister of Labour or to one of the revisers appointed under the Old Age Pensions Act to investigate eligibility. Evidence must be furnished that the applicant is eligible for an allowance under the Act and two testimonials as to her ability to care for her children properly must be submitted. The Bureau has power to determine the rate of an allowance. Allowances are to be paid monthly by cheque and to take effect from the day following receipt by the Bureau of the information, but no pensions are payable before Dec. 15, 1938.

Each beneficiary must establish annually her right to an allowance and notice must be given the Bureau of any change in circumstances that may affect the grant. The regulations fix the rate of the allowances to be paid.

A woman with two dependent children under 16 is to receive $40 monthly and an additional $5 for each additional child, the total allowance not to exceed $60. The Act provides for payment of the allowance to a grandmother taking the place of the mother but if she is the wife of the children's grandfather he is not released from the obligation to provide for the children imposed by the Civil Code of Quebec. Allowances may be reduced if the beneficiary or her dependants can be provided for to some extent by relatives by marriage whom the Civil Code requires to contribute to their support.

If a beneficiary or her dependants own real property exceeding $1,000 in net value, the annual allowance may be reduced by 30 p.c. when the applicant resides in a city or town of 10,000 or more, and by 39 p.c. if she resides elsewhere. Where the net value of real property is between $500 and $1,000 there is a 15 p.c. reduction. The allowance may be cut by 5 p.c. where movable property other than household furniture is acquired to the value of more than $500. The allowance is to be decreased also where there are assets other than household furniture and clothing convertible into cash, and general power is given the Bureau to make reductions in other circumstances where it seems reasonable. A person owning or acquiring liquid assets other than household furniture valued at over $1,000 is not entitled to allowance.

Ontario.—The Mothers' Allowances Act (R.S.O., 1927, c. 280) was originally passed at the session of 1920, as c. 89 of the Statutes of that year, and came into force on Oct. 1, 1920. Table 33 shows the operations under the Act from its inception.

33.—Mothers' Allowances in Ontario, fiscal years 1921-38.

Fiscal Year.	Numbers Assisted.		Benefits Paid.		
	Families.	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			$	$	$
1921 (year ended Oct. 31)	2,660	8,271	416,152	358,515	774,667
1922 " "	3,559	10,922	762,059	620,079	1,382,138
1923 " "	3,870	11,791	889,252	723,449	1,612,701
1924 " "	4,058	12,374	939,522	768,372	1,707,894
1925 " "	5,007	14,577	974,174	807,107	1,781,281
1926 " "	5,215	15,115	1,027,518	849,367	1,876,885
1927 " "	5,540	16,060	1,101,817	905,740	2,007,557
1928 " "	5,976	17,328	1,203,920	986,487	2,190,407
1929 " "	6,411	18,605	1,260,299	1,045,784	2,306,083
1930 " "	6,712	19,620	1,292,245	1,084,743	2,376,988
1931 " "	7,157	20,906	1,400,418	1,181,468	2,581,886
1932 " "	7,418	21,468	1,455,100	1,234,627	2,689,727
1933 " "	7,653	22,068	1,516,260	1,285,613	2,801,873
1934 " "	8,144	23,173	1,640,283	1,385,872	3,026,155
1935 (Nov. 1, 1934, to Mar. 31, 1935)	7,875	22,417	745,885	634,080	1,379,965
1936 (year ended Mar. 31)	11,189	26,697	2,133,490	1,813,326	3,946,816
1937 " "	12,856	28,700	2,477,631	2,104,916	4,582,547
1938 " "	13,644	29,551	4,851,577	Nil	4,851,577

Manitoba.—The Mothers' Allowances Act (1916, c. 69), the first of its kind in Canada, came into operation on Mar. 10, 1916. Allowances are now made under the authority of the Child Welfare Act (1936, c. 6). Table 34 shows the benefits paid since Dec. 1, 1918, together with statistics of families and children assisted, these latter figures are not available for all of the earlier years.

34.—Mothers' Allowances in Manitoba, 1919-38.

Year.	Numbers Assisted.		Benefits Paid.		
	Families.[1]	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			$	$	$
1919 (year ended Nov. 30)	413	[2]	107,651	95,833	203,484
1920 " "	532	[2]	157,484	193,360	350,844
1921 (Dec. 1, 1920, to Aug. 31, 1921)	648	[2]	212,237	225,000	437,237
1922 (year ended Aug. 31)	669	[2]	179,060	150,199	329,259
1923 " "	722	2,609	236,399	225,749	462,148
1924 " "	728	[2]	185,661	220,359	406,020
1925 (Sept. 1, 1924 to Apr. 30, 1925)	756	[2]	144,590	150,937	295,527
1926 (Year ended Apr. 30)	825	2,507	172,425	229,796	402,221
1927 " "	855	2,595	183,924	230,000	413,924
1928 " "	967	2,986	286,798	244,559	531,357
1929 " "	1,062	3,239	276,144	281,477	557,621
1930 " "	1,055	3,180	100,979	384,081	485,060
1931 " "	1,042	3,326	140,545	325,194	465,739
1932 " "	1,070	3,412	471,704	Nil	471,704
1933 " "	1,078	3,374	432,615	"	432,615
1934 " "	1,092	3,313	438,649	"	438,649
1935 " "	1,110	3,302	440,769	"	440,769
1936 " "	1,140	3,386	444,869	"	444,869
1937 " "	1,141	3,271	445,549	"	445,549
1937 (8 months May 1-Dec. 31)	1,053	3,072	283,451	"	283,451
1938 (calendar year)	1,079	3,197	426,621	"	426,621

[1] Except where otherwise indicated, these figures show the total numbers of families assisted during the year. [2] Not available.

Saskatchewan.—Mothers' allowances are paid under the authority of Part VI of the Child Welfare Act (R.S.S., 1930, c. 231), originally enacted in 1917 as the Mothers' Pensions Act. Table **35** shows the numbers of families assisted and the amounts paid under the Act for the fiscal years ended Apr. 30, 1929-38.

35.—Mothers' Allowances in Saskatchewan, fiscal years ended Apr. 30, 1929-38.

Fiscal Year.	Numbers Assisted.		Benefits Paid.
	Families.	Children.	
			$
1929	1,214	4,657	521,880
1930	1,800	5,465	467,575
1931	2,183	6,590	544,250
1932	2,372	6,431	483,618
1933	2,511	6,733	403,915
1934	2,608	6,794	407,993
1935	2,826	7,368	440.580
1936	2,944	7,638	474,120
1937	2,958	7,487	482,411
1938	3,007	7,854	495,988

Alberta.—The Mothers' Allowance Act (R.S.A., 1922, c. 215) was originally passed at the session of 1919, and came into force in that year. Table **36** shows the numbers of families assisted and the amounts paid under the Act from its inception to Mar. 31, 1938.

36.—Mothers' Allowances in Alberta, 1919-38.

Year.	Numbers Assisted.		Benefits Paid.		
	Families.	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			$	$	$
1919 (calendar year)	245	766	19,714	19,714	39,428
1920 "	477	1,502	80,642	76,787	157,429
1921 "	562	1,636	103,572	98,302	201,874
1922 "	721	1,864	126,122	120.629	246,751
1923 "	758	1,887	122,651	120,035	242,686
1924 "	742	2,136	129,242	128,169	257,411
1925 "	828	2,271	142,004	141,582	283,586
1926 "	907	2,290	157,272	157,013	314,285
1927 "	968	2,445	174,500	174,440	348,940
1928 "	1,029	2,517	182,382	182,222	364,604
1929 "	1,094	2,880	198,378	198,377	396,755
1930 "	1,270	3,409	234,828	231,708	466,536
1932 (year ended Mar. 31)	1,499	3,747	242,314	237,293	479,607
1933 "	1,675	3,882	222,606	216,590	439,196
1934 "	1,724	4,060	223,262	216,721	439,983
1935 "	1,812	4,274	233,904	228,489	462,393
1936 "	2,088	4,764	257,327	250,175	507,502
1937 "	2,319	5,172	410,872	164,636	575,508
1938 "	2,317	5,177	462,143	151,421	613,564

British Columbia.—The Mother's Pensions Act (R.S.B.C., 1936, c. 194) was originally passed as c. 61 of the Acts of 1920, and came into force in July, 1920. Table **37** shows the numbers of families and the numbers of children assisted, together with the amounts expended in each of the fiscal years 1921-38.

Under the original Act, the full cost of pensions was borne by the province. In 1932 one-half of the costs of pensions paid to residents of a municipality was charged to the municipality to which they belonged, but at the end of the fiscal year 1936-37 responsibility for all payments was again assumed by the province.

In 1938 there were 400 cases where mothers received extra allowances for incapacitated husbands.

37.—Mothers' Allowances in British Columbia, fiscal years 1921-38.

Fiscal Year.	Numbers Assisted.[1]		Benefits Paid.[2]		
	Families.	Children.	Chargeable to Province.	Chargeable to Municipalities.	Total.
			$	$	$
1921	[3]	[3]	[3]	[3]	273,575
1922	771	1,978	487,888	Nil	487,888
1923	785	1,990	414,227	"	414,227
1924	847	2,240	423,233	"	423,233
1925	943	2,544	463,669	"	463,669
1926	986	2,723	518,471	"	518,471
1927	1,100	3,050	612,645	"	612,645
1928	1,233	2,757	628,600	"	628,600
1929	1,370	3,028	677,510	"	677,510
1930	1,468	3,229	759,698	"	759,698
1931	1,568	3,295	816,272	"	816,272
1932	1,547	3,213	842,977	"	842,977
1933	1,514	3,274	468,511	311,129	779,640
1934	1,436	3,147	469,916	151,586	621,502
1935	1,410	2,922	365,288	224,334	589,622
1936	1,485	3,026	403,558	212,997	616,555
1937	1,567	3,191	443,803	238,785	682,588
1938	1,692	3,481	747,878	Nil	747,878

[1] Years ended Sept. 30 for 1921-32, and fiscal years ended Mar. 31 from 1933. [2] Fiscal years ended Mar. 31 in all cases. [3] Not available.

PART II.—WAGES.

Section 1.—Wage Rates and Hours for Various Classes of Labour in Canada.*

Statistics of rates of wages and hours of labour have been collected for recent years by the Dominion Department of Labour, and are published in a series of bulletins supplementary to the *Labour Gazette*. Report No. 1 of this series was issued in March, 1921. The records upon which the statistics are based begin in most cases with the year 1901. Index numbers have been calculated to show the general movement of wage rates; the series covers six groups of occupations back to 1901, and common factory labour, miscellaneous factory trades, and lumbering back to 1911. The index numbers are based upon wage rates in 1913 as 100. Average index numbers, weighted according to the average numbers of employees in each group as shown in the censuses of 1921 and 1931, are also given. Weighting has not been applied within the groups. In groups by occupations or industries such as these, weighting makes comparatively little difference as rates of wages for the various classes of labour tend to rise and fall to the same extent even in different localities. In the three groups of common factory labour, miscellaneous factory trades, and logging and sawmilling, the index numbers being calculated from samples, the averages are automatically weighted by the numbers of samples, which vary according to the numbers of workers in the various occupations and industries. The upward movement that appeared in the index numbers for some groups in 1934 became general in 1935 and continued in 1936, 1937, and 1938. On steam railways wages were increased in 1937 and in 1938.

---

* See pp. 774-783 of the 1927-28 Year Book for an article on the "Wages Statistics of the Census of 1921" and pp. 797-799 of the 1933 Year Book for "Earnings in the Census Year 1931".

1.—Index Numbers of Rates of Wages for Various Classes of Labour in Canada, 1913-38.

NOTE.—Rates of wages in 1913=100. Index numbers for 1901-12 are given at p. 674 of the 1932 Year Book.

Year.	Building Trades.	Metal Trades.	Printing Trades.	Electric Railways.	Steam Railways.	Coal Mining.	Common Factory Labour.	Miscellaneous Factory Trades.	Logging and Sawmilling.	General Average, Weighted.[1]
1913	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1914	100·8	100·5	102·4	101·0	101·4	101·9	101·0	103·2	94·7	101·3
1915	101·5	101·5	103·6	97·8	101·7	102·3	101·0	106·2	89·1	102·2
1916	102·4	106·9	105·8	102·2	105·9	111·7	110·4	115·1	109·5	109·5
1917	109·9	128·0	111·3	114·6	124·6	130·8	129·2	128·0	130·2	125·6
1918	125·9	155·2	123·7	142·9	158·0	157·8	152·3	146·8	150·5	147·2
1919	148·2	180·1	145·9	163·2	183·9	170·5	180·2	180·2	169·8	173·4
1920	180·9	209·4	184·0	194·2	221·0	197·7	215·3	216·8	202·7	207·7
1921	170·5	186·8	193·3	192·1	195·9	208·3	190·6	202·0	152·6	189·9
1922	162·5	173·7	192·3	184·4	184·4	197·8	183·0	189·1	158·7	180·2
1923	166·4	174·0	188·9	186·2	186·4	197·8	181·7	196·1	170·4	184·2
1924	169·7	175·5	191·9	186·4	186·4	192·4	183·2	197·6	183·1	186·4
1925	170·4	175·4	192·8	187·8	186·4	167·6	186·3	195·5	178·7	185·1
1926	172·1	177·4	193·3	188·4	186·4	167·4	187·3	196·7	180·8	186·3
1927	179·3	178·1	195·0	189·9	198·4	167·9	187·7	199·4	182·8	190·4
1928	185·6	180·1	198·3	194·1	198·4	168·9	187·1	200·9	184·3	192·2
1929	197·5	184·6	202·3	198·6	204·3	168·9	187·8	202·1	185·6	196·0
1930	203·2	186·6	203·3	199·4	204·3	169·4	188·2	202·3	183·9	197·1
1931	195·7	182·9	205·1	198·6	199·2	169·4	183·4	197·3	163·0	189·1
1932	178·2	174·7	194·2	191·1	183·9	164·0	173·6	184·3	141·3	177·7
1933	158·0	169·2	184·3	182·7	179·7	161·9	168·1	175·7	121·7	168·3
1934	154·8	168·0	183·5	182·4	173·7	162·9	170·8	180·5	145·1	170·5
1935	159·8	169·7	184·5	183·7	183·9	165·8	174·9	184·7	152·3	175·4
1936	160·8	170·1	185·2	185·5	183·9	165·9	179·7	188·8	165·9	178·6
1937	165·3	187·4	187·8	190·5	196·1	166·8	195·5	203·7	188·1	191·7
1938	169·4	189·3	190·7	193·7	204·3	174·4	199·7	210·3	197·2	199·4

[1] Weighted according to average numbers of workers in each group in 1921 and 1931.

Rates of wages and hours of labour in 1938 in various trades in the largest cities of the five economic areas of Canada will be found in Table **2**. For statistics of the wages and hours of employees of steam railways and wages of employees in and about coal mines in Canada, see pp. 751-752 of the 1930 Year Book, where the rates etc., for the seven or eight years prior to 1929, are given. Wages in coal mines of Nova Scotia were reduced 10 p.c. in 1932, and in Drumheller, Alta., in 1933; in 1935 in both districts 5 p.c. was restored. On steam railways deductions of 10 p.c. were in effect during 1932, 1933, 1935, and 1936; 15 p.c. in 1934; running trades 20 p.c. for six months in 1933. In 1937 the deduction was reduced gradually from 10 p.c. to 4 p.c. On Feb. 1, 1938, the deduction became 2 p.c., and the basic rates were restored Apr. 1. In editions of the Year Book prior to 1933, a table showing the wages and hours of common labour in factories for certain cities is given in this section. The information for 1938 will be found at p. 66 of *Wages and Hours of Labour in Canada*, published as a supplement to the *Labour Gazette* for March, 1939. For the five cities of Table **2** it is included under sub-heading 5 of the stub.

The attention of those specially interested in the subject of wages and hours is directed to the valuable detailed study, *Wages and Hours of Labour in Canada, 1929, 1937 and 1938*, published by the Department of Labour as a supplement to the *Labour Gazette* for March, 1939.

2.—Rates of Wages and Hours of Labour in Various Trades and for Unskilled Factory Labour in Certain Cities of Canada, 1938.[1]

Occupation.	Halifax.		Montreal.		Toronto.		Winnipeg.		Vancouver.	
	Wages per Hour.	Hours per Week.	Wages per Hour.	Hours per Week.	Wages per. Hour.	Hours per Week.	Wages per Hour.	Hours per Week.	Wages per Hour.	Hours per Week.
	$	No.	$	No.	$	No.	$	No.	$	No.
Building Trades—										
Bricklayers and masons..	·97½	44	·80-·90	44	1·05	40	1·10	44	1·10	40
Carpenters.....	·65	44	·70	44	·95	40	·85	44	·75-·90	40-44
Electrical workers......	·85	44	·75	44	1·00	40	·85	44	·75-1·00	40-44
Painters.......	·50-·55	44	·66	44	·75	40	·70	44	·62½-·80	40-44
Plasterers......	·80	44	·80	44	·90	40	1·10	44	1·00	40
Plumbers......	·70-·80	44	·75	40-44	1·00	40	·95	44	1·00	40-44
Sheet-metal workers......	·50-·70	44	·65-·70	44	·97½	40	·70	44	1·00	40-44
Stonecutters...	·70	44-48	·80	44	·95	40	·90	44	1·00	40
Labourers......	·35-·40	44-48	·40	44-48	·35-·50	40-60	·40-·45	44-48	·45-·50	40-48
Metal Trades—										
Blacksmiths...	·65-·90	40-44	·45-·80	40-50	·47-·75	40-50	·45-·73	40-50	·60-·95	40-44
Boilermakers..	·55-·90	40-44	·50-·90	40-47	·57-·70	44-48	·57½-·76	50	·62½-·95	40-44
Machinists.....	·60-·90	40-44	·47½-·85	40-55	·50-·80	37½-50	·50-·80	40-50	·60-·95	40-48
Moulders......	·65-·75	44-48	·50-·87½	40-48	·50-·85	50-85	·53-·70	40-50	·70-·77	40-45
Printing Trades—	Wages per Week.		Wages per Week.		Wages per Week.		Wages per Week.		Wages per Week.	
Compositors, machine and hand, news...	35·00	42	36·00-45·50	44-48	44·00	40	42·50	46	39·75-47·70	37½-45
Compositors, machine, and hand, job....	25·00-35·00	42-48	31·50-40·50	44-45	33·00-40·00	40-44	35·20-38·50	44-48	40·50	44-48
Pressmen, news	24·00-34·00	48	35·00-43·00	44-48	44·00-50·30	40-48	40·50	48	47·70	48
Pressmen, job..	25·00-28·00	44-48	31·50-38·00	44-45	33·00-40·00	40-48	35·20-38·50	44-48	40·50	44-48
Bookbinders...	27·00-35·00	44-48	31·50-36·00	45	33·00-44·00	40-48	33·00-39·00	44-48	40·00-45·00	44-48
Bindery girls...	11·00	44-48	12·60-15·50	45	13·20-18·00	40-48	12·00-18·00	44-48	14·00-20·25	44-48
Electric Railways—	Wages per Hour.		Wages per Hour.		Wages per Hour.		Wages per Hour.		Wages per Hour.	
Conductors and motormen[1]...	·61	53	·55	54	·60	44-48	·55½	42	·63	48
Linemen.......	·50-·77	44	·53-·57	48	·72-·78	44	·47½-·89	48	·68½-·97	40
Shop and barn men.........	·51-·77	44-56	·34-·62	40	·54-·81	44-48	·42-·69	44-48	·52-·75	44-48
Electricians....	·72-·82	44	·55-·65	40	·60-·79	44-48	·55-·69	44-48	·70-·75	44
Trackmen and labourers....	·35-·55	44	·35	48	·45-·55	48	·37½-·42	48	·45-·54	44
Unskilled Factory Labour........	·34-·42	44-50	·25-·60	40-60	·30-·65	40-50	·35-·65	40-50	·40-·70	40-48

---

[1] Maximum rates based on length of service; Halifax rate for one-man cars; 5 cents extra for one-man car operators in Montreal, Toronto, and Winnipeg; Vancouver 6 cents extra.

Section 2.—Wages and Hours of Labour Under Provincial Minimum Wage Legislation.

All of the provinces in Canada except Prince Edward Island have in effect legislation providing for the establishment of minimum wage rates for female employees in certain industries and occupations through boards which are authorized to establish and enforce these minimum rates. Such legislation was enacted between 1918 and 1920 in all of these provinces except New Brunswick. In Nova Scotia the legislation is applicable to female workers only, but in the other provinces it now applies both to male and female workers. There is also legislation for the restriction of hours of labour which are regulated in some of the provinces by the minimum wage boards but in the others only under the factory acts, etc. (See Sec. 12 of Part I on Labour Legislation in 1938.)

In British Columbia since 1925, and in Manitoba since 1931, separate orders have been effective for some classes of male workers and their scope was much extended in 1934 and subsequent years. In New Brunswick, the Labour and Industrial Relations Act, 1937, which reproduces the provisions of the Fair Wage Act, 1936, provides for the establishment of minimum wage rates but no orders of general application had been issued at the end of 1938. In Saskatchewan since 1936, and in Quebec from 1937, all minimum wage orders for females apply also to male workers. In Alberta, separate orders for male workers were issued in 1937 for the first time. In Ontario, under the Minimum Wage Act, 1937, the legislation was extended to male workers but only one order for males had been made effective at the end of 1938, namely, that relating to the textile industry. In Quebec and New Brunswick, wages in logging are regulated under forestry regulation acts.

Beginning in Quebec in 1934, certain wage rates established through collective agreements were made binding by industries in certain districts or throughout the province, under the Collective Labour Agreements Extension Act, 1934, and later under the Workmen's Wages Act, 1937, and the Collective Labour Agreements Act, 1938. The Industrial Standards Acts of Ontario and Alberta in 1935, that of Nova Scotia in 1936, and of Saskatchewan in 1937 provided for joint conferences of employers and employees for the establishment of wage scales in various industries in the districts concerned.

Information as to minimum wage rates for work under Dominion Government contracts for the manufacture and supply of equipment, stores, clothing, etc., appears in the paragraphs on Fair Wages in the section on the Dominion Department of Labour at pp. 779-782.

Subsection 1.—Minimum Wages for Females.

The table on pp. 844-845 gives information as to minimum rates of wages and as to hours for which these rates are payable under the orders of the various provincial boards and commissions in effect at the end of 1938.

The information here given is intended to afford merely a statistical summary of the minimum wages with hours of labour in the provinces and industries affected, and, while some of the more significant details have been given in footnotes, it has been found impossible to include the information in such form as to indicate any more than the general conditions under these provisions.

For complete information it is necessary to refer to the orders of the various provincial boards. These have been given in some detail in the *Labour Gazette* from time to time as issued, and in summary form, by provinces, in the Wages and Hours Supplement to the *Labour Gazette,* March, 1939. In some provinces these orders include regulations as to employment conditions, sanitary conditions, etc. The boards have power to issue licences for lower rates of pay for handicapped workers and to meet special conditions in the nature of emergencies.

3.—Minimum Wage Rates for Female Workers in Canada Under

NOTE.—For further details regarding minimum wage rates for females, see pp. 123-134 of

	Industry.	Nova Scotia.[1]			Quebec.[2]			Ontario.[3]		
		Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.
		Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.[8]	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.	
		$	$		$	$		$	$	
1	Manufacturing.........	10·00–11·00	6·00–10·00	44–50	9·60–15·75	5·75–13·25	48–60	10·00–12·50[9]	6·00–11·00[10]	48–54
2	Fruit and vegetable canning............	[14]	[14]	–	12½–14c. per hr.	12½–14c. per hr.	–	18–25c. per hr.	15–20c. per hr.	–
3	Laundering, dry cleaning, etc............	10·00–11·00	6·00–10·00	44–50	9·60–14·40[15]	5·75–12·00[15]	48–60	11·00–12·50	8·00–11·00	48
4	Retail stores..........	10·00–11·00	6·00–10·00	44–50	9·60–15·75	5·75–13·25	48–60	8·00–12·50	6·00–11·00	48–54
5	Hotels, restaurants, etc..................	10·00–11·00	8·00–10·00	44–50	5·40–16·20	5·40–16·20	54	20–26c. per hr.	20–26c. per hr.	–
6	Hairdressing, etc......	10·00–11·00	6·00–10·00	48	9·60–15·75	5·75–13·25	48–60	10·00–12·50	4·00–10·50	48–54
7	Theatres and amusement places.........	[14]	[14]	–	9·60–15·75	5·75–13·25	48–60	11·00–12·50[21]	11·00–12·50[21]	48–54
8	Offices................	10·00–11·00	7·00–10·00	48	7·25–15·00	7·25–15·00	48–60	8·00–12·50[24]	6·00–11·00	48–54
9	Telephone operators...	9·00–11·00	6·00–10·00	44–50	9·60 15·75	5·75–13·25	48–60	7·00–12·50	5·00–11·00	48

---

[1] Rates apply to cities and incorporated towns.

[2] Rates vary according to zones, the highest rates being in Zone I—Montreal and district; all rates apply to males as well as females.

[3] Rates vary according to locality and population.

[4] Rates apply in all cities throughout province to male and female workers.

[5] Only in cities and towns and within a radius of 5 miles; rates apply to males as well as females.

[6] Orders apply throughout the province except telephone exchange order which applies only in centres with 100 lines or more.

[7] Rates apply throughout the province. Provision made for fishing industry (except canning), as follows: experienced—$15·50 per week (48 hours) or 32 7/24 cents per hour; minors, learners, etc.—$12·75 to $14·75 per week.

[8] Rates for experienced, minors, learners, etc. are not specified but for most industries three rates are given. The highest rate which is used here as the experienced rate, must usually be paid to 60 p.c. of the workers.

[9] Textiles: experienced—$16, inexperienced—$11–$15.

[10] Custom millinery trades not in factories: minors, learners, etc.—$5–$10.

[11] 50 hours per week for tailoring, dressmaking, and millinery establishments.

[12] Factory order includes garages, automobile service stations, fuel and lumber yards.

[13] Millinery shops, $4–$10 per week for learners.

Orders of Provincial Minimum Wage Boards, as at Dec. 31, 1938.

Wages and Hours of Labour, Report No. 22, issued as a supplement to the *Labour Gazette*, March, 1939.

Manitoba.[4]			Saskatchewan.[5]			Alberta.[6]			British Columbia.[7]			
Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	Wages per Week.		Hours per Week.	
Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.		Adults, Experienced.	Minors, Learners, etc.		
$	$		$	$		$	$		$	$		
10·00–12·00	6·00–11·00	48[11]	13·00[12]	7·50–11·50[12]	43–48	12·50	6·00–11·00[13]	48	14·00	7·00–13·00	48	1
[14]	[14]	–	[14]	[14]	–	[14]	[14]	–	30c. per hr.	25c. per hr.	10-hr. day	2
10·00–12·00	6·00–11·00	48	13·00	7·50–11·50	43–48	12·50	9·50–11·50	48	13·50	8·00–12·00	48	3
10·00–12·00[16]	6·00–11·00[16]	48	14·00[17]	8·00–13·00[17]	43–48	12·50[17]	7·50–11·00[17]	48	12·50	7·50–12·00	48	4
8·64–12·00[18]	8·64–9·60	48	10·00–12·00	8·00–10·00	60	12·50[19]	9·00–11·00[19]	48	14·00[20]	9·00–12·00	48	5
12·00	8·00–11·00	48	13·00	7·00–12·00	48	14·00	6·00–12·00	48	14·25	10·00–13·00	–	6
12·00[22]	12·00[22]	48	12·00	12·00	43–48	14·00	14·00	48	14·25[23]	14·25	48	7
12·50[25]	8·00–11·50[25]	44	13·00[26]	7·50–11·50	43–48	14·00[27]	7·50–12·00[27]	48	15·00	11·00–14·00	48	8
10·00 and 12·00	10·00 and 12·00	48	[14]	[14]	–	14·00[6]	7·50–12·00[6]	48	15·00[28]	11·00–13·00[28]	48	9

[14] No minimum wage.

[15] In Montreal district—19 to 26 cents per hour, 54-hour week.

[16] Departmental stores and mail-order houses: experienced—$12; minors, learners, etc., $8–$11.

[17] Applies also to wholesale and mail-order houses.

[18] Rate of $12 applies to Winnipeg and district, and Brandon at any time; to Portage la Prairie, May to October; and to any summer resort, June to September.

[19] Restaurants only—any place where meals are provided.

[20] Applies also to elevator operators; there is a separate order for janitresses in apartment houses.

[21] Or 25–30 cents per hour.

[22] Cleaners 35 cents per hour. No minors to be employed.

[23] Applies also to attendants at garages and automobile service stations, drivers of motor cars and other vehicles.

[24] Applies also to elevator operators including learners (under separate order).

[25] Winnipeg, St. Boniface, St. James, and Brandon.

[26] Applies only to offices connected with industries named in factories order (manufacturing).

[27] Applies also to physicians', dentists' and optometrists' offices, post, and telegraph offices.

[28] Applies also to telegraph employees.

In the preceding table figures for adult learners, and for minors and apprentices are shown in a range covering both classes. There is wide variation in the rates for such classes in the several industries and the time allowed for such periods varies in most cases from one year to 18 months. Probationary periods (usually 3 months) without pay are allowed in some cases—beauty parlours, millinery, dressmaking in shops, etc.

Subsection 2.—Minimum Wages for Male Employees.

Provisions for minimum wage rates for male employees are outlined in the Wages and Hours Supplement to the *Labour Gazette*, March, 1939, pp. 130-152, a summary of which follows:—

In Prince Edward Island, the city of Charlottetown, as authorized by an amendment to its incorporating Act, has established by by-law a minimum wage rate of 35 cents per hour for labourers and workmen engaged by contractors.

In New Brunswick the Labour and Industrial Relations Act, 1937, which incorporates the Fair Wage Act, 1936, provides for the establishment of minimum rates of wages and maximum hours for both male and female workers. Orders have been issued for a number of individual establishments but none of general application in any trade or industry. Under the Forest Operations Act, 1934, the Commission, during 1937, established for stream-driving a minimum average rate of $3 per day and board, net, or its equivalent in case of piece work. For booming and sorting a minimum rate of 28 cents an hour without board was set. After Oct. 1, 1938, for cutting, yarding, and hauling, a minimum rate for each employee of $30 and a minimum average rate of $34 per month and board, net, were fixed.

In Quebec, the Fair Wage Act, 1937, replacing the Women's Minimum Wage Act, applies to both male and female workers (see Subsection 1, Table 3). Under the Act to Assure Reasonable Wages for Workmen Engaged in Forest Operations, 1937, a minimum of $45 per month with board is established. An Order in Council under the Act approved Aug. 30, 1938, provides that for youths of 18 to 20 years, incapacitated persons, and men of 60 years or over the minimum is $30 per month with board; regular hours are limited to 60 per week and time and a quarter for overtime.

In Ontario, until repealed in 1937, the Minimum Wage Act had provided that wherever a male employee replaces a female employee in any class of industry, the male employee must be paid at least the minimum rate established. This Act was replaced by the Minimum Wage Act, 1937, applying to both male and female workers. At the end of 1938 only one order had been issued under the new Act (textile industry —see Subsection 1, Table 3) and the old orders were still in effect.

In Manitoba, the Minimum Wage Act provides that when a minimum wage scale has been established for any industry, no person of the age of 18 years or over may be paid less than 25 cents per hour except where the Board has passed specific regulations providing for a different rate. As all industries except farming, market gardening, and domestic service are now under regulation, the above minimum rate of 25 cents per hour for male persons of 18 years of age or over applies to all except where special regulations have been made, as follows: in manufacturing, departmental stores and mail-order houses, retail and wholesale stores, and general employees the orders apply to male as well as female employees (see Subsection 1, Table 3). For hotels, restaurants, etc., the minimum for male workers over 18 is

$12 per week of 48 hours at any time in Greater Winnipeg and Brandon and during summer months in Portage la Prairie and summer resorts. The minimum is $10 per week of 48 hours in other places. All orders apply to boys under 18 in cities except that special orders for boys under 18 in cities provide for minimum rates of $8 to $10 in manufacturing establishments, hotels, garages, etc. The Taxicab Act establishes for Greater Winnipeg a minimum of $17·50 per week or 40 cents per hour with a minimum of $1·60 per day, hours not to exceed 12 per day, 6 days per week. The Highway Traffic Act sets minimum rates for drivers of public passenger vehicles at $80 per month or $20 per week, 9 hours per day for driving, 12 hours in any capacity, 6 days per week. The Fair Wage Act provides for minimum wages and maximum hours on public works under contract, and also on private construction work as defined in the Act, under schedules approved by the Minister of Public Works.

In Saskatchewan, minimum wage rates for female employees in shops and factories now extend to male employees and to all of the province by amendment in 1936 to the Minimum Wage Act, 1919. (See Subsection 1, Table **3**). The Coal Mining Industry Act, 1935, and an amendment to the Public Services Vehicles Act in 1935 provide for the establishment of minimum wage rates but none had been set by the end of 1938.

In Alberta, under the Male Minimum Wage Act, a general order covers all workers except those engaged in farm work and domestic service, those working under schedules under the Industrial Standards Act and casual, seasonal, or temporary workers for employers not engaged in the industry and, except woodworking, etc., in rural districts. The general order establishes a minimum of 33⅓ cents per hour for full-time employees over 21 years with at least one year's experience and 28 and 30 cents for such employees with less than one year's experience; for full-time employees under 21 years, the minimum rates are from 20 cents for beginners to 33⅓ cents after three years' experience. Corresponding minimum rates for part-time employees are from 30 to 40 cents for those over 21 and from 23 to 35 cents for those under 21. A special order for employees of sawmills, box factories, woodworking, logging, and tie-cutting in rural districts provides a minimum rate of $30 per month. Another special order sets the following minimum rates for retail delivery boys: under 16 years—$7·50, under 18—$9·50 per week, if employed by the week or longer period; 17 to 22½ cents per hour if employed by the day or hour.

In British Columbia, under the Male Minimum Wage Act, 1934, applying to all occupations except farm labourers and domestic servants, orders have been issued as to the following: logging, sawmilling, furniture and woodworking industries, baking, fruit and vegetable canning, construction, the carpentry trade in some localities, shipbuilding, goods transportation by road, mercantile industry, stationary engineers, barbers, elevator operators, first-aid attendants, and janitors. In many instances the minimum rates for unskilled labour are: 40 cents per hour for males over 21 years of age, 25 to 35 cents for those between 18 and 21, and 20 to 25 cents per hour for those under 18. In addition, the Female Minimum Wage Act, 1934, provides that where a minimum wage rate has been set for female workers in any industry, male workers may not be employed at work usually done by female employees at less than the fixed minimum wage.

Subsection 3.—Wages and Hours of Labour under Collective Agreements and Schedules of Wages and Hours Made Obligatory by Order in Council in Certain Provinces.

In Nova Scotia, under the Industrial Standards Act, 1936, minimum wage rates and standard hours have been fixed for bricklayers, carpenters, electrical workers, plumbers and steamfitters, and plasterers in Halifax and Dartmouth.

In Quebec, under the Collective Labour Agreements Act, 1938, (which replaced the Workmen's Wages Act, 1937, and the Collective Labour Agreements Extension Act, 1934), wages and hours in agreements between representatives of employers and of workers have been extended and made compulsory for all employers in the trade or industry in the district affected, and were in effect at the end of 1938, as follows:—For the whole province, in certain manufacturing industries, *viz.*, boots and shoes; gloves; men's and boys' clothing (except work clothing); children's clothing; women's coats and suits; dress cutting; lithographing; furniture; can, container, and metal utensils; also for granite, marble, and stone quarrying: in most of the cities and towns and in some villages for the building trades, and the barbering and hairdressing trades: in three districts, which include all cities of over 11,000 population, for job-printing trades; and in two of these districts for newspaper work as well: for iron oxide mining and aluminium smelting in the districts in which these industries are carried on: in the four largest cities and in Granby and Sorel, for bakeries: in Sorel, for butchers: in Quebec, Montreal, and Sherbrooke, for garages and service stations: in the Montreal and Quebec districts, for the fur industry, and for ornamental iron and bronze work: in Montreal and district, for women's and children's millinery; men's hat and cap industry; the passenger, freight, and industrial car and bus manufacturing industry; and for funeral undertakers: in Montreal and in Sorel, for longshoremen: in Quebec, for dairy employees and tavern employees: in Sorel, for taxi and truck drivers: in four cities and towns, for clerks and accountants: in six Eastern Township counties, for horseshoers and wheelwrights: in Montreal, Sherbrooke, and Victoriaville, for shoe repairing.

In Ontario, under the Industrial Standards Act, 1935, wages and hours schedules have been made binding by Order in Council and were effective at the end of 1938, for the following industries: throughout the province, for breweries, furniture (wood) factories. men's and boys' clothing factories, and women's cloak and suit factories; in four districts, for the logging industry; in Ottawa, for bakers; in Toronto, for jewellery manufacturing, coal hoisting, coal handling and driving, and taxi driving; in Toronto, Ottawa, Kingston, Cornwall, Brantford, St. Thomas, Kirkland Lake, Windsor, Sault Ste. Marie, and Timmins, for one or more of the building trades; and in most of the cities and larger towns for barbers.

In Saskatchewan, under the Industrial Standards Act, 1937, schedules were in effect by Order in Council at the end of 1938, as follows: two building trades in Moose Jaw and six building trades in Regina; barbers in eleven districts and hairdressers in five districts; taxi drivers, draying, transferring and storage, and shoe repairing at Regina; bakers and sign painters at Moose Jaw; jewellery workers at Saskatoon.

In Alberta, under the Industrial Standards Act, 1935, schedules have been put into effect by Order in Council and were effective at the end of 1938, as follows: in Calgary, Edmonton, and the adjacent districts, for bakers; seven building trades at Calgary and two at Edmonton and their surrounding districts; taxi drivers at Edmonton; the welding industry at Edmonton and Calgary; taxi drivers and bowling alley employees at Edmonton and Calgary; the honey-producing industry in the Coaldale, Taber, Vauxhall zone, and the Eastern Irrigation zone; the lumbering industry, including logging, sawmills, planing mills, and box factories, in the Flatbush, Chisholm, Spurfield, and Faust zones. Under the Department of Trade and Industry Act, 1934, a code setting forth minimum wages for barbers throughout the province was in effect at the end of the year 1938.

Section 3.—Cost of Living of Wage-Earners.

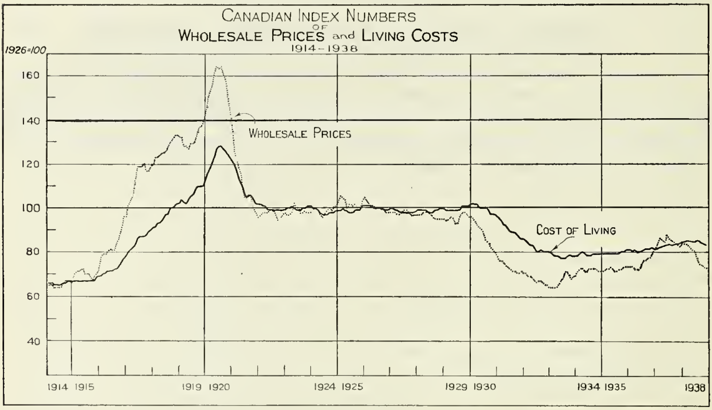
The material appearing under this heading has been transferred to Chapter XX —Prices, where it appears with the Bureau of Statistics general cost of living index under the heading "Retail Prices and Services", p. 866.

Section 4.—Earnings in the Census Year 1931.

The total number of wage-earners in Canada reporting earnings for the census year ended June 1, 1931, was 2,476,414 or 96·35 p.c. of all wage-earners and the total amount of their earnings was $2,100,552,700. A table at p. 789 of the 1937 Year Book shows statistics of wage-earners, by sex, and their earnings, for the census years 1911, 1921, and 1931.

CHAPTER XX.—PRICES.*

For purposes of statistical analysis, commodity prices are usually divided into two principal groups, wholesale prices and retail prices. The term 'wholesale' is not used literally, and primary producers', factory, and jobbers' quotations, as well as actual wholesale prices, are often included in this group. Markets in which this type of price is quoted are usually well organized, and frequently very sensitive. They are responsive to changing business and monetary conditions. Wholesale quotations are accordingly preferred, therefore, for sensitive index numbers of prices designed to reflect price reactions to business factors, and for more general index numbers to furnish a basis of measuring changes in the purchasing power of money. Although possessing admitted defects, general wholesale price index numbers are widely used for this latter purpose.



Retail prices represent more diffused markets, and are less sensitive. There is ordinarily a lag of several months between this type of quotation and its wholesale counterpart. Retail prices are important from a statistical point of view, however, because they indicate changes in living costs and, along with measurements of income, show fluctuations in the economic well-being of the community.

Section 1.—Wholesale Prices of Commodities.

Subsection 1.—Historical Review of Canadian Prices.

Annual average index numbers for every year since Confederation are given in Table **1**. In that table will be noted the high prices of 1867, following the close of the American Civil War and the Austro-Prussian War of 1866, and the tendency to declining prices in subsequent years. Prices went up again after the Franco-German War of 1871 and reached a high point in 1872 and 1873, but the crisis of the latter year resulted in a decline. A downward trend persisted fairly steadily throughout the 25 years from 1872 to 1897, when the gold supply of the world did not increase as rapidly as the supply of commodities. This gold shortage was accentuated by the demonetization of silver, which ceased to be legal tender and was reduced to the level of token money by most nations. Relief came through the discoveries of gold in the Rand mines and the application of the cyanide process to low-grade ores. The result was a rapidly increasing world production of gold from about 1890 to the outbreak of the Great War, with consequent rising prices as the volume of the new gold became an appreciable part of the total stock. Thus prices increased from the low point of 75·6 in 1897 to 100 in 1913 and 102·3 in 1914. Afterwards, the Great War, both through the scarcity of commodities which it occasioned and the inflation of the currency which it produced, drove prices rapidly upward to a maximum of 243·5 in 1920, followed by a rapid drop to 152·0 in 1922. This was succeeded by a slight increase to 160·3 in 1925. The tendency from 1925 to 1929 was gradually downward, although the period was one of increasing prosperity.

---

* Except as otherwise credited, the sections of this chapter have been revised under the direction of Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. This Branch compiles and publishes statistics on: Prices (wholesale, retail, securities, bond yields, services, exchange, cost of living), Retail and Wholesale Trade, Foreign Capital Investments in Canada and Canadian Investments Abroad, Balance of International Payments, and other related subjects. For a complete list of the publications of this Branch, the reader is referred to Chapter XXIX, Section I, under "Internal Trade".

Commencing in the autumn of 1929, the severe economic depression was accompanied by a drastic decline in wholesale prices. Its extent may be gauged from the drop of the wholesale price index from 153·7 in August, 1929, to 99·2 in February, 1933. A subsequent irregular rise carried this index upward to 132·1 in 1937, although the trend of prices was downward in the latter half of that year. This movement persisted throughout the greater part of 1938, carrying the wholesale index lower by 7 p.c. to 122·8.

1.—Annual Index Numbers of Wholesale Prices in Canada, 1867-1938.

(1913=100. Unweighted index from 1867-1912.)

Year.	Index No.	Year.	Index No.	Year.	Index No.	Year.	Index No.
1867	133·0	1885	92·7	1903	86·9	1921	171·8
1868	128·7	1886	90·7	1904	87·0	1922	152·0
1869	126·5	1887	91·9	1905	87·8	1923	153·0
1870	123·5	1888	93·5	1906	92·6	1924	155·2
1871	124·5	1889	92·6	1907	96·2	1925	160·3
1872	135·7	1890	93·0	1908	90·9	1926	156·2
1873	133·8	1891	91·4	1909	91·4	1927	152·6
1874	129·0	1892	86·2	1910	94·3	1928	150·6
1875	120·7	1893	85·2	1911	95·0	1929	149·3
1876	116·6	1894	80·6	1912	99·5	1930	135·3
1877	115·1	1895	79·6	**1913**	**100·0**	1931	112·6
1878	104·3	1896	76·0	1914	102·3	1932	104·2
1879	101·0	1897	75·6	1915	109·9	1933	104·8
1880	112·9	1898	77·8	1916	131·6	1934	111·8
1881	109·9	1899	81·4	1917	178·5	1935	112·6
1882	112·1	1900	85·8	1918	199·0	1936	116·5
1883	106·0	1901	84·5	1919	209·2	1937	132·1
1884	100·6	1902	86·2	1920	243·5	1938	122·8

Subsection 2.—The Index Number on a Post-War Base (1926).

Wholesale price levels in Canada during 1938 were reduced materially. The Dominion Bureau of Statistics weekly index of 567 commodity prices receded almost steadily from a level of 84·3 for the first week of January to 74·0 for the week of September 9. At this point the index stiffened and remained comparatively firm through the last quarter, closing the year at 73·2. Between December, 1937, and December, 1938, the monthly general index of wholesale prices dropped from 82·7 to 73·3, for a loss of 11·4 p.c. The vegetable products index, paced by the rapidly falling and heavily weighted grain index, was mainly responsible for this major setback. As it became increasingly evident that Canada and other leading exporters would harvest large wheat crops, the grain index tumbled sharply to the year's low of 41·7 on Nov. 4. This compared with an opening index of 96·1.

2.—Weighted General Wholesale Price Index Numbers, by Months, 1928-38.

(1926=100.)

Month.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
January	96·9	94·0	95·3	75·9	69·5	63·8	70·7	71·4	72·9	81·9	83·8
February	96·8	95·0	93·9	75·5	68·9	63·5	72·1	71·8	72·5	82·9	83·6
March	97·7	95·6	91·8	74·5	69·0	64·3	72·1	71·9	72·4	85·4	83·1
April	98·3	94·5	91·2	73·9	68·2	65·3	71·3	72·5	72·2	86·2	82·3
May	97·9	93·4	89·7	72·5	67·4	66·7	71·1	72·2	71·9	85·3[1]	80·3
June	96·9	93·4	87·7	71·8	66·4	67·5	72·0	71·4	72·3	84·6	80·1
July	96·0	97·2	85·3	71·3	66·5	70·5	72·0	71·4	74·3	87·6	78·6
August	95·3	98·4	83·7	70·5	66·7	69·5	72·2	71·7	76·1	85·6	76·0
September	95·4	97·8	82·1	69·7	65·9	68·9	71·9	72·4	76·4	85·0	74·5
October	95·2	96·8	81·0	69·9	65·0	67·9	71·3	73·1	77·1	84·7	74·1
November	94·9	95·7	79·5	70·7	64·7	68·9	71·1	72·7	77·2	83·1	73·5
December	94·6	96·0	77·7	70·4	64·0	69·0	71·1	72·7	79·6	82·7	73·3
Yearly Averages	**96·4**	**95·6**	**86·6**	**72·1**	**66·7**	**67·1**	**71·6**	**72·1**	**74·6**	**84·6**	**78·6**

[1] Revised since the publication of the 1938 Year Book.

The range of fluctuation in the component groups between December, 1937, and December, 1938, explains to some extent the behaviour of the general index. The 1938 net changes (with 1937 net changes in parentheses) were: vegetable products −29·3 p.c. (+1·5 p.c.), animal products −6·8 p.c. (+5·8 p.c.), textiles −3·9 p.c. (−2·7 p.c.), wood and wood products +0·9 p.c. (+8·5 p.c.), iron and its products −5·6 p.c. (+13·9 p.c.), non-ferrous metals −1·4 p.c. (−7·1 p.c.), non-metallic minerals −1·0 p.c. (+1·4 p.c.), and chemicals −2·1 p.c. (+2·0 p.c.). It is readily apparent that index fluctuations with the exception of vegetable products were comparatively small. Of the eight groups, wood and wood products was the only one to show a gain in 1938, and that of a minor character. The tremendous effect of the recession in the grain index was clearly shown by the loss in the vegetable group index. The position of the animal products group index was altered considerably during the latter half of 1938, coinciding with the substantially cheaper feed situation. Live-stock prices which had been kept at a high level for the first six months were quick to react to the changing grain picture. Declines in the textile group were mostly confined to raw wool and its manufactures. In the wood and wood products group strength was due mainly to the higher prices ruling in the newsprint industry when a basic New York price of $50 a ton was set for 1938. All sections of the iron and steel group experienced weakness though price reductions were chiefly centred in the pig iron and rolling-mill products indexes.

Lower prices in the aluminium, antimony, and solder sub-group indexes were mainly responsible for the narrow change in the non-ferrous group. Removal of the sales tax on building materials in 1938 contributed to a slight recession in the non-metallic group index, and lower gasoline prices were also associated with the decline in this group. Price reductions in the chemical group were general and outweighed advances for fertilizers and industrial gases.

The Canadian farm products index, in which grains are the most important constituent, suffered a sharp setback in 1938. The opening level was 87·3 but successive monthly declines brought it down to a 1938 low of 63·0 on Sept. 9. Following the stabilizing effect of the 80-cent minimum price set on No. 1 Manitoba Northern wheat by the Canadian Grain Board, the index ruled firmer for the remainder of the year, closing at 64·6.

As might be expected from the foregoing comments, primary commodity indexes showed considerable recessions during 1938, compared with manufactured goods indexes. The position occupied by producer goods, raw and partly manufactured materials, and Canadian farm products relative to manufactured materials was approximately on a par with December, 1935, or about 10 p.c. below corresponding levels of a year ago. An interesting point to be noted was the pronounced stability of the building materials index, which showed greater resistance to decline than either primary or fully manufactured product indexes.

Percentage Changes in Wholesale Prices of Basic Commodities.—A close examination of the price movements of basic commodities indicates the underlying character of recent trends. Percentage changes in prices for twenty such products are given in the statement below for the latest two years, the commodities being grouped by direction of price movement.

Between December, 1936, and December, 1937, such prices ranged from an increase of 27 p.c. to a decrease of 33 p.c. and between December, 1937, and December, 1938, from an increase of 16 p.c. to a decrease of 56 p.c.

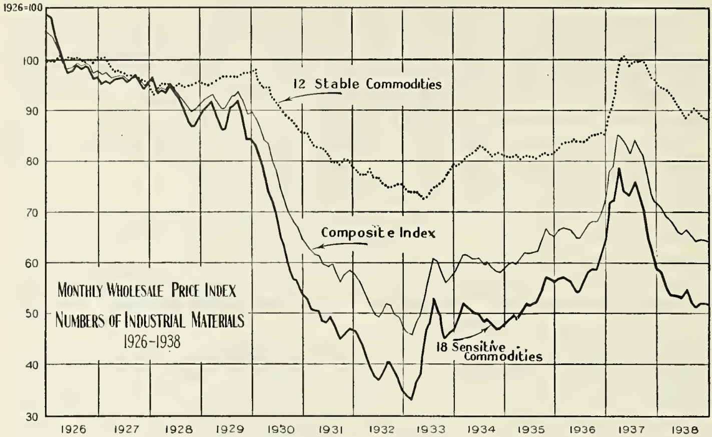
The contrast between field and animal farm products is rather striking, especially in the net results over the two-year period. On this basis all field crops represented show very substantial reductions in price, but cattle and hogs show the highest increases among the twenty commodities listed, and, while butter, hides and skins, and raw wool each fell in price, the net reductions (especially of butter) are not so great as in any of the field crops.

On the basis of individual years, only two out of the twenty commodities show a consistently upward trend and prices of five commodities have moved consistently downwards. The group showing a reversal of trend in an upward direction in 1938 includes such imported raw materials as rubber, raw cotton, and raw silk, which suffered more severely than most from falling prices in 1937, while wheat is the most outstanding of those commodities showing a reversal of trend in a downward direction.

PERCENTAGE CHANGES IN BASIC COMMODITY WHOLESALE PRICES, 1937 AND 1938.

Commodity.	Dec. 1936–Dec. 1937.	Dec. 1937–Dec. 1938.	Dec. 1936–Dec. 1938.
	Rising in both 1937 and 1938.		
Hogs	+5	+7	+12
Coal	+2	+3	+5
	Falling in 1937, rising in 1938.		
Rubber	−27	+11	−19
Copper	−8	+2	−6
Hides and skins	−29	+5	−25
Raw cotton	−33	+2	−32
Raw silk	−20	+16	−7
	Rising in 1937, falling in 1938.		
Wheat	+9	−56	−52
Flour	+1	−35	−34
Wood-pulp	+27	−21	0
Pig iron	+17	−11	+3
Lumber	+4	−4	0
Butter	+16	−27	−15
Cattle	+21	−5	+16
Petroleum products	+2	−4	−3
	Falling in both 1937 and 1938.		
Rye	−22	−48	−60
Barley	−22	−38	−52
Oats	−6	−43	−47
Raw wool	−12	−24	−33
Lead	−30	−6	−34

Industrial Material Prices in Canada.—The Dominion Bureau of Statistics inaugurated in 1938 a new series of index numbers, consisting of 30 basic industrial materials. It is computed from an unweighted geometric average with 1926 prices equal to 100. The 30 commodities were divided into 2 main groups of 18 sensitive manufacturing materials and 12 stable price series. The 18 sensitive commodities were, in turn, separated into 2 sub-groups of 13 sensitive manufacturing materials and 5 food products.



The major trends outlined by the index of industrial material prices since 1926 can be summarized briefly as follows: from 1926 to 1929 underlying instability was apparent and the general index moved lower at a gradual pace throughout the period. From the base average, the index fell to 93·7 in September, 1929. Then followed a severe decline, which depressed industrial material prices along with other principal commodity groups until the beginning of 1933. Temporary improvement occurred in 1932 during the summer months, but markets weakened again towards the close and dropped to new low levels in February, 1933. At this point the index stood at 45·8. A gradual rise punctuated by intermittent short-period declines ensued. In March, 1937, industrial material prices attained their highest point since 1929, the index for the month reaching 85·2. A slightly lower peak was shown in July, after a minor reaction, when the index rose to 84·5 from 82·3 in June. From this period to November, 1938, the index of industrial material prices receded to levels on a par with those of 1936 and the latter part of 1935; the index for November being 64·2. The course of the industrial material price index since 1929 has been generally similar to that of the Bureau's wholesale price index of 567 commodities.

3.—Monthly Price Index Numbers of Industrial Materials, 1926-38.

(1926=100.)

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1926........	104·7	102·6	100·7	99·4	98·3	98·4	99·5	98·9	99·2	99·1	97·4	98·0
1927........	97·2	97·5	96·4	96·7	96·8	96·9	96·0	96·6	96·7	96·0	94·8	96·1
1928........	95·4	93·7	94·5	94·1	95·2	93·8	93·4	92·1	90·9	89·9	90·2	91·1
1929........	92·2	92·7	93·2	91·8	90·3	90·4	92·9	93·0	93·7	92·4	89·4	89·5
1930........	88·3	86·8	84·0	83·4	79·8	77·4	74·0	71·9	69·3	67·7	66·6	64·9
1931........	63·9	62·1	61·5	61·2	59·5	59·3	59·6	57·9	56·1	57·7	58·1	57·7
1932........	56·8	55·2	53·4	51·5	49·7	49·2	50·3	51·6	51·5	49·9	49·1	47·4
1933........	46·0	45·8	48·4	49·3	54·0	56·7	60·8	59·4	58·6	55·7	57·0	57·6
1934........	59·4	61·7	61·5	60·9	60·7	60·9	59·8	60·1	59·1	58·4	58·3	58·9
1935........	59·8	60·0	59·7	61·1	62·0	61·7	62·0	62·1	64·1	65·9	65·5	65·3
1936........	66·1	66·5	66·3	66·0	64·6	64·6	66·4	67·7	68·2	68·0	69·9	73·1
1937........	78·1	79·3	85·2	84·7	83·4	82·3	84·5	82·9	81·2	76·8	73·4	71·5
1938........	70·6	69·2	68·8	67·4	65·9	65·5	66·3	65·1	64·1	64·2	64·2	64·0

4.—Annual Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), by Groups (Chief Component Material Classification), 1918-38, with Monthly Figures for 1937 and 1938.

NOTE.—Annual figures for 1913-17, and monthly ones for 1936, are given at p. 815 of the 1938 edition; those for certain earlier years are shown in the corresponding table of previous editions.

Year and Month.	Vegetable Products.	Animals and Their Products.	Fibres, Textiles, and Textile Products.	Wood, Wood Products, and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	All Commodities.
	Numbers of Commodity Price Series Used.								
1913–25	67	50	28	21	26	15	16	13	236
1926–33	124	74	60	44	39	15	73	73	502
1934–38	135	76	85	49	44	18	83	77	567
	Index Numbers.								
1918	127·9	127·1	157·1	89·1	156·9[1]	141·9	82·3	118·7	127·4
1919	136·1	140·8	163·8	109·6	139·1	133·5	93·6[1]	117·5	134·0[1]
1920	167·0	145·1	176·5[1]	154·4	168·4	135·5	112·2	141·5	155·9
1921	103·5	109·6	96·0	129·4	128·0	97·0	116·6	117·0	110·0
1922	86·2	96·0	101·7	106·3	104·6	97·3	107·0	105·4	97·3
1923	83·7	95·0	116·9	113·0	115·8	95·3	104·4	104·4	98·0
1924	89·2	91·8	117·9	105·9	111·0	94·8	104·1	102·5	99·4
1925	100·6	100·3	112·5	101·6	104·5	103·9	100·3	99·6	102·6
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	98·3	101·9	93·7	98·5	96·2	91·5	96·5	98·3	97·7
1928	93·0	108·1	94·5	98·7	93·2	92·0	92·5	95·3	96·4
1929	91·6	109·0	91·3	93·9	93·7	99·2	92·9	95·4	95·6
1930	77·7	99·1	81·8	88·7	91·1	80·7	91·3	92·8	86·6
1931	56·9	73·9	73·4	79·1	87·4	64·6	86·5	86·7	72·1
1932	54·8	59·7	69·7	69·1	86·3	59·0	85·5	83·9	66·7
1933	59·3	59·4	69·7	62·8	85·4	64·3	84·4	81·3	67·1
1934	66·6	67·2	72·9	65·4	87·0	64·3	86·0	81·2	71·6
1935	67·3	70·4	70·2	64·6	87·2	69·1	85·5	79·1	72·1
1936	72·6	71·8	69·7[1]	68·5	88·0	70·0	85·5	78·0	74·6
1937	88·4	78·4	72·8[1]	76·7	101·8	83·8	86·6	81·4	84·6
1938	73·8	76·7	67·5	77·5	100·4	70·9	86·7	79·9	78·6
1937.									
January	87·6	75·4	72·2[1]	73·0	92·1	82·5	85·6	79·2	81·9
February	88·6	75·2	73·3[1]	74·2	94·1	86·2	86·0	80·0	82·9
March	90·6	74·9	73·9[1]	77·3	100·1	97·6	85·5	81·6	85·4
April	91·3	77·1	75·4[1]	78·5	102·9	89·6	85·6	82·7	86·2
May	88·7	76·8	75·3[1]	78·9	102·8	85·9	86·6	82·2	85·5[1]
June	87·0	77·5	75·0[1]	77·8	103·0	84·3	86·8	81·6	84·6
July	95·5	78·9	74·6[1]	78·0	103·9	85·9	87·0	81·7	87·6
August	87·7	81·0	73·7[1]	77·9	104·5	86·3	87·2	81·8	85·6
September	86·5	81·8	71·8[1]	77·2	105·3	83·4	87·4	81·7	85·0
October	87·6	81·7	70·2[1]	76·2	105·0	77·4	87·3	81·9	84·7
November	84·5	80·7	69·2	75·7	104·1	73·7	87·4	81·3	83·1
December	85·2	78·2	69·0	75·5	103·9	72·5	87·2	80·7	82·7
1938.									
January	87·4	77·2	68·9	79·6	103·9	72·7	87·1	80·7	83·8
February	87·0	77·8	68·7	79·4	103·7	71·1	87·1	80·6	83·6
March	85·1	79·1	68·4	79·0	103·2	71·3	87·0	80·5	83·1
April	84·0	78·9	68·1	77·6	102·5	70·6	86·6	80·5	82·3
May	79·1	77·1	67·9	77·2	101·5	69·0	87·1	80·5	80·3
June	78·6	78·0	67·4	76·8	101·4	67·8	87·1	80·1	80·1
July	74·4	78·3	67·5	76·7	97·8	70·6	86·5	79·4	78·6
August	66·8	76·2	67·1	77·3	98·0	70·0	86·5	79·4	76·0
September	61·7	76·4	66·9	76·9	98·2	70·8	86·7	79·4	74·5
October	60·8	74·8	66·7	76·9	98·1	73·0	86·4	79·4	74·1
November	60·2	73·3	66·5	76·2	98·2	72·7	86·2	79·3	73·5
December	60·3	72·9	66·2	76·2	98·1	71·5	86·3	79·0	73·3

---

[1] Revised since the publication of the 1938 Year Book.

5.—Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Purpose, Yearly Averages, 1926-38, and by Months, October, 1937, to December, 1938.

NOTE.—Annual figures for 1914-25 and monthly ones for 1937 will be found at p. 816 of the 1938 edition; those for certain earlier years are shown in the corresponding table of earlier editions.

Year and Month.	Consumer Goods.			Producer Goods.					All Commodities.
						Producer Materials.			
	All.	Foods, Beverages and Tobacco.	Other.	All.	Producer Equipment.	All.	Building and Construction.	Manufacturing.	
	Numbers of Commodity Price Series Used.								
1913-25	98	74	24	146	15	131	32	99	236
1926-33	204	116	88	351	22	329	97	232	502
1934-38	236	126	110	402	24	378	111	267	567
	Index Numbers.								
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	95·7	99·4	93·3	98·5	101·1	98·2	96·1	98·6	97·7
1928	95·6	99·6	92·9	96·7	93·7	97·0	97·4	96·9	96·4
1929	94·7	100·0	91·1	96·1	94·6	96·3	99·0	95·9	95·6
1930	89·3	93·1	86·8	82·5	92·9	81·7	90·8	79·7	86·6
1931	76·2	70·4	80·0	67·1	90·0	64·6	81·9	61·7	72·1
1932	71·3	61·5	77·8	62·4	88·7	59·5	77·2	56·5	66·7
1933	71·1	63·8	76·0	63·1	86·0	60·5	78·3	57·5	67·1
1934	74·1	69·7	77·0	67·8	88·9	65·5	82·5	62·6	71·6
1935	73·6	70·4	75·7	69·5	89·8	67·2	81·2	64·8	72·1
1936	74·7	73·4	75·5	72·4	90·0	70·4	85·3	67·9	74·6
1937	79·5	81·2	78·4	86·1	93·8	85·2	94·4	83·6	84·6
1938	77·2	77·1	77·2	75·8	95·1	73·7	89·1	71·1	78·6
1937.									
October	80·6	83·0	79·0	84·8	94·5	83·7	92·6	82·2	84·7
November	79·7	81·6	78·5	82·4	94·5	81·0	91·8	79·2	83·1
December	79·1	80·2	78·3	82·6	94·3	81·3	91·7	79·5	82·7
1938.									
January	78·8	79·9	78·1	84·5	94·5	83·4	91·7	82·0	83·8
February	79·0	80·7	77·9	83·7	94·5	82·5	91·4	81·0	83·6
March	79·1	81·2	77·7	82·5	94·5	81·2	91·0	79·5	83·1
April	78·5	80·5	77·1	81·8	94·5	80·4	89·9	78·8	82·3
May	77·7	78·4	77·2	78·9	95·5	77·0	89·4	74·9	80·3
June	77·4	78·1	76·9	78·6	95·5	76·7	89·0	74·6	80·1
July	77·7	78·9	76·9	75·8	95·5	73·6	87·4	71·3	78·6
August	76·3	75·5	76·8	71·7	95·5	69·1	88·5	65·8	76·0
September	76·0	74·3	77·2	68·7	95·5	65·7	87·8	62·0	74·5
October	75·2	73·0	76·7	68·3	95·3	65·3	88·0	61·5	74·1
November	74·8	72·0	76·7	67·9	95·3	64·8	87·5	60·9	73·5
December	74·6	71·5	76·6	68·2	95·2	65·2	87·3	61·4	73·3

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Yearly Averages, 1932-38.

NOTE.—Figures for 1918, 1919, and 1921-29 will be found at p. 866 of the 1934-35 Year Book, and those for 1930 and 1931 at p. 795 of the 1937 Year Book.

Item.	Numbers of Commodities.			1932.	1933.	1934.	1935.	1936.	1937.	1938.
	1913-25.	1926-33.	1934-38.							
Aggregate combined indexes, raw and partly manufactured	107	232	245	55·0	56·6	63·5	66·0	70·8	84·3	72·7
Aggregate combined indexes, fully and chiefly manufactured	129	276	322	69·8	70·2	73·4	72·8	73·6	80·5	78·2
Articles of Farm Origin—[1]										
1. Field (grains, etc.)—										
(a) Raw and partly manufactured	46	98	98	41·0	45·3	54·2	56·2	63·8	82·8	63·0
(b) Fully and chiefly manufactured	41	69	91	67·1	71·2	73·9	72·8	73·8	82·4	76·5
(c) Combined indexes	87	167	186	55·1	59·3	64·8	65·1	69·2	83·1	70·3

---

[1] Domestic and foreign.

6.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Yearly Averages, 1932-38—concluded.

Item.	Numbers of Commodities.			1932.	1933.	1934.	1935.	1936.	1937.	1938.
	1913-25.	1926-33.	1934-38.							
Articles of Farm Origin—[1] conc.										
2. Animal—										
(a) Raw and partly manufactured	25	41	46	59·9	59·0	66·0	71·6	73·6	82·7	79·8
(b) Fully and chiefly manufactured	28	49	59	61·1	62·5	69·8	69·9	71·4	76·2	74·3
(c) Combined indexes	53	90	105	60·6	61·0	68·2	70·6	72·4	79·0	76·7
Canadian Farm Products—										
1. Field (grains, etc.)	20	46	52	41·1	45·8	53·8	57·3	65·8	88·3	69·0
2. Animal	16	13	18	60·7	59·7	67·7	74·0	75·3	85·0	81·3
3. Combined indexes	36	59	70	48·4	51·0	59·0	63·5	69·4	87·1	73·6
Articles of Marine Origin—										
(a) Raw and partly manufactured	2	5	5	56·2	56·2	60·3	61·8	67·1	72·1	65·4
(b) Fully and chiefly manufactured	6	11	11	66·6	65·4	75·1	72·0	70·1	71·7	72·0
(c) Combined indexes	8	16	16	63·8	62·9	71·1	69·2	69·3	71·8	70·2
Articles of Forest Origin—										
(a) Raw and partly manufactured	16	31	37	69·6	69·7	76·3	74·5	80·8	94·0	85·5
(b) Fully and chiefly manufactured	5	21	20	68·9	57·2	56·1	56·1	57·5	61·1	69·9
(c) Combined indexes	21	52	57	69·2	63·0	65·5	64·7	68·4	76·4	77·2
Articles of Mineral Origin—										
(a) Raw and partly manufactured	18	57	62	77·0	75·6	77·5	79·6	79·9	85·3	81·5
(b) Fully and chiefly manufactured	49	126	141	84·9	84·6	86·0	85·3	85·2	91·6	90·5
(c) Combined indexes	67	183	203	81·4	80·6	82·2	82·8	82·8	88·8	86·5

[1] Domestic and foreign.

7.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933, 1937, and 1938.

NOTE.—Comparable figures for 1926-29 will be found at pp. 807-809 of the 1933 Year Book, for 1930-34 at pp. 867-869 of the 1934-35 Year Book, and for 1935-36 at pp. 817-819 of the 1938 Year Book.

Origin and Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Totals, Raw and Partly Manufactured—												
1933	51·2	50·6	52·1	53·0	56·0	57·6	62·9	60·9	59·9	57·5	59·3	58·9
1937	82·5	83·8	86·8	87·6	85·8	83·2	88·3	83·6	83·7	83·5	81·1	80·8
1938	81·9	81·1	79·6	79·0	75·8	75·4	72·5	67·5	65·5	65·1	64·6	64·9
Totals, Fully and Chiefly Manufactured—												
1933	67·2	66·8	67·8	69·6	70·4	70·2	72·4	71·7	71·5	71·2	71·7	72·0
1937	78·5	78·7	79·6	80·6	80·1	80·3	82·3	81·9	81·3	81·4	80·7	80·3
1938	81·5	81·9	82·0	81·3	79·3	79·2	78·4	76·8	75·6	74·7	73·9	73·6
I. Articles of Farm Origin (domestic and foreign)—												
A. Field (grains, fruits, cotton, etc.)—												
Raw and Partly Manufactured—												
1933	35·1	35·8	38·3	40·7	46·5	48·8	58·6	53·5	49·4	44·4	46·3	45·3
1937	82·7	83·9	87·4	88·1	83·8	81·1	91·0	80·4	79·8	80·8	76·4	77·6
1938	80·9	80·0	77·0	76·0	69·5	69·5	63·4	53·3	47·5	46·9	46·1	46·6
Fully and Chiefly Manufactured—												
1933	64·6	64·2	64·7	70·2	73·2	72·5	77·3	75·0	74·1	72·7	73·3	73·2
1937	81·7	82·0	83·2	84·4	83·8	83·3	87·3	84·6	83·0	83·3	82·3	82·5
1938	83·2	83·3	82·6	81·5	79·0	78·0	76·8	73·9	71·1	70·1	69·5	69·3
Totals—												
1933	51·0	51·1	52·5	56·6	60·9	61·6	68·7	65·1	62·7	59·6	60·8	60·3
1937	82·2	82·9	85·1	86·1	83·8	82·3	89·0	82·7	81·5	82·1	79·6	80·2
1938	82·1	81·8	80·0	79·0	74·6	74·1	70·6	64·4	60·2	59·4	58·7	58·8

7.—Weighted Index Numbers of Wholesale Prices of Commodities (on the 1926 Base), Classified According to Origin and Degree of Manufacture, by Months, 1933, 1937, and 1938—concluded.

Origin and Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
B. Animal—												
Raw and Partly Manufactured—												
1933	57·9	55·0	55·9	56·2	57·7	57·4	58·5	59·9	62·2	62·0	65·3	65·1
1937	79·5	80·5	81·4	83·8	84·4	80·8	81·8	82·7	85·2	84·5	84·5	81·6
1938	80·9	79·4	79·8	80·6	81·1	79·8	79·3	77·9	80·1	79·4	79·3	80·1
Fully and Chiefly Manufactured—												
1933	59·2	58·9	62·3	63·8	61·9	61·9	63·0	63·3	63·0	63·1	64·0	65·4
1937	75·2	74·8	73·8	75·0	73·7	74·8	76·3	78·6	78·6	79·1	77·7	76·1
1938	75·3	77·1	78·7	77·9	74·1	75·0	75·7	74·0	73·3	71·8	69·9	68·8
Totals—												
1933	58·6	57·2	59·5	60·5	60·1	59·9	61·0	61·8	62·7	62·6	64·6	65·3
1937	77·1	77·3	77·1	78·8	78·3	77·4	78·7	80·4	81·5	81·4	80·6	78·5
1938	77·7	78·1	79·2	79·2	77·1	77·1	77·3	75·7	76·2	75·1	74·0	73·7
C. Canadian Farm Products—												
Field (grains, etc.)—												
1933	34·8	35·8	37·8	40·7	46·9	49·4	60·8	55·1	49·5	44·1	46·7	45·3
1937	88·3	89·6	93·4	94·4	89·0	85·1	97·7	84·6	84·8	86·3	81·8	83·9
1938	88·8	87·5	83·9	83·2	74·6	74·3	65·9	54·9	53·4	53·6	54·6	53·8
Animal—												
1933	58·3	54·7	56·1	56·3	58·3	57·7	58·9	60·6	63·2	63·0	67·7	67·4
1937	82·1	82·6	84·2	86·3	85·7	81·4	83·9	85·5	88·8	86·9	87·4	84·6
1938	82·2	81·1	81·6	81·2	81·7	80·4	80·7	79·6	81·1	81·0	82·1	82·6
Totals—												
1933	43·6	42·9	44·6	46·5	51·2	52·5	60·1	57·2	54·6	51·2	54·6	53·6
1937	86·0	87·0	90·0	91·4	87·8	83·7	92·5	84·9	86·3	86·5	83·9	84·2
1938	86·3	85·1	83·0	82·5	77·3	76·6	71·4	64·1	63·8	63·8	64·9	64·6
II. Articles of Marine Origin—												
Raw and Partly Manufactured—												
1933	54·5	44·6	49·6	46·6	48·1	54·8	56·5	59·2	63·3	67·5	71·0	58·9
1937	68·7	69·1	57·2	60·9	62·1	70·5	68·5	83·0	84·7	85·6	82·1	72·8
1938	70·9	73·1	69·5	56·0	56·0	55·4	56·7	62·6	72·7	76·3	73·6	60·8
Fully and Chiefly Manufactured—												
1933	60·8	61·2	61·8	63·0	62·7	62·3	63·6	67·7	67·7	68·9	69·0	69·7
1937	69·3	69·5	69·7	72·1	71·3	72·2	72·4	70·9	73·4	72·6	73·7	73·8
1938	74·1	74·6	74·7	74·0	72·5	72·4	71·1	70·8	69·9	70·6	69·3	69·8
Totals—												
1933	59·1	56·7	58·5	58·6	58·7	60·3	61·7	65·4	66·5	68·5	69·5	66·8
1937	69·1	69·4	66·3	69·1	68·8	71·7	71·3	74·2	76·4	76·1	76·0	73·5
1938	73·2	74·2	73·3	69·1	68·0	67·8	67·2	68·6	70·6	72·1	70·5	67·4
III. Articles of Forest Origin—												
Raw and Partly Manufactured—												
1933	66·0	65·2	65·2	64·4	64·8	69·7	71·5	72·8	74·0	74·7	74·4	74·4
1937	86·8	89·3	95·8	98·0	98·5	96·1	96·6	96·3	94·9	92·8	91·7	91·3
1938	89·6	89·3	88·2	86·0	84·8	83·6	83·9	84·3	84·4	84·4	83·2	83·1
Fully and Chiefly Manufactured—												
1933	61·8	61·6	61·3	55·3	55·2	55·1	55·2	55·3	55·3	56·0	56·1	56·2
1937	60·7	60·7	60·7	60·9	61·1	61·2	61·2	61·2	61·3	61·2	61·2	61·3
1938	70·2	70·2	70·3	69·8	69·9	70·2	69·9	69·7	69·9	69·8	69·6	69·7
Totals—												
1933	63·8	63·3	63·1	59·5	59·7	61·9	62·8	63·5	64·0	64·7	64·6	64·7
1937	72·9	74·0	77·1	78·2	78·5	77·5	77·7	77·6	77·0	75·9	75·4	75·3
1938	79·2	79·1	78·6	77·4	76·8	76·4	76·4	76·5	76·7	76·6	75·9	75·9
IV. Articles of Mineral Origin—												
Raw and Partly Manufactured—												
1933	75·8	75·6	75·9	74·9	74·1	74·4	75·7	75·0	76·5	75·9	76·2	77·3
1937	84·0	85·7	88·8	86·3	86·5	85·4	86·1	86·2	85·7	84·0	82·7	82·3
1938	82·1	81·8	81·8	81·2	80·8	80·7	81·2	81·0	81·8	82·0	82·0	81·6
Fully and Chiefly Manufactured—												
1933	84·2	83·3	83·4	83·6	83·7	84·2	84·3	84·7	85·8	86·1	86·1	86·1
1937	87·4	88·2	91·0	92·0	91·9	92·2	92·7	93·2	93·3	92·8	92·6	92·2
1938	92·2	92·0	91·8	91·6	91·4	91·3	89·7	89·6	89·6	89·2	89·0	88·9
Totals—												
1933	80·4	79·9	80·0	79·7	79·4	79·8	80·5	80·4	81·6	81·5	81·7	82·2
1937	85·9	87·1	90·0	89·5	89·5	89·2	89·7	90·1	89·9	88·9	88·2	87·8
1938	87·7	87·4	87·3	87·0	86·7	86·6	85·9	85·8	86·1	86·0	85·9	85·6

Wholesale Price Index Numbers of Principal Exports and Imports.—Declines of unusual magnitude were noted in the prices of Canada's leading exports during 1938. The Bureau's index of export wholesale prices dropped continuously from 82·3 in January to 61·9 in September, where it levelled off to close the year at 60·8. This was down 22·9 p.c. from December, 1937. An analysis of individual commodity price changes showed practically all the loss concentrated in the vegetable products group in which grain and flour prices are of predominant importance. These prices, as noted previously, suffered very sharp recessions in 1938. The actual index decline in vegetable product exports was from 89·8 in January to 44·4 in December. With the exception of the chemicals group which advanced, due to increases in fertilizer prices, all other sections of the export index series experienced moderate price recessions between the opening and closing months of the year.

Compared with the export situation, import price movements were of a minor character, the net recession amounting to only 4·4 p.c. between December, 1937, and December, 1938. Sub-group indexes in this series were generally lower in December, 1938, than at the close of the previous year although slight advances were noted for non-ferrous and chemical sub-group indexes. At the beginning of 1938 the import price index level exceeded that for exports by only 4·1 p.c., the narrowest difference in several years. By December, however, the divergence in favour of imports had increased to 35·2 p.c.

8.—Index Numbers of Wholesale Prices of Exports and Imports, 1926-38 (1926=100).

Note.—Statistics for 1913-25 are given at p. 830 of the 1938 Year Book.

Year.	Vegetables and Their Products.	Animals and Their Products.	Fibres, Textiles, and Textile Products.	Wood, Wood Products, and Paper.	Iron and Its Products.	Non-Ferrous Metals and Their Products.	Non-Metallic Minerals and Their Products.	Chemicals and Allied Products.	Total.
					EXPORTS.				
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	97·0	105·3	88·1	99·1	97·4	90·7	89·2	100·7	97·8
1928	88·8	111·3	95·3	98·7	91·9	87·5	83·8	98·2	94·2
1929	89·3	107·9	85·8	91·9	91·3	88·0	83·7	95·6	92·2
1930	65·3	94·2	69·5	87·3	87·4	75·4	81·5	92·9	77·4
1931	41·7	70·7	56·7	78·3	82·7	66·2	67·8	87·9	60·5
1932	40·4	55·7	39·6	68·1	81·3	65·2	66·1	68·3	54·9
1933	44·9	58·0	46·1	60·0	75·8	68·6	65·7	69·9	55·2
1934	53·4	64·5	59·1	62·5	78·0	67·6	71·2	72·2	60·6
1935	56·7	65·7	49·5	60·8	78·0	73·8	70·5	71·7	62·2
1936	63·9	69·5	61·4	65·0	80·1	71·1	71·3	71·8	66·8
1937	87·2	76·5	73·1	72·1	95·2	79·9	69·7	72·1	81·1
1938	66·4	69·1	54·5	73·4	93·9	70·7	80·0	78·1	70·9
					IMPORTS.				
1926	**100·0**	**100·0**	**100·0**	–	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	102·0	111·7	92·4	–	98·1	94·7	93·2	98·0	97·7
1928	94·0	132·0	94·7	–	94·8	99·7	88·4	92·3	96·1
1929	85·6	113·3	93·4	–	95·0	116·9	89·4	92·0	94·2
1930	75·0	94·5	75·5	–	91·1	84·7	87·3	87·5	83·7
1931	60·1	72·5	59·9	–	88·7	57·5	80·3	83·3	72·4
1932	57·6	59·1	52·6	–	91·1	46·5	84·8	86·3	70·5
1933	61·4	67·7	57·3	–	92·2	59·1	79·4	86·9	73·0
1934	65·0	69·7	64·2	–	92·7	66·7	83·6	88·0	76·5
1935	68·5	74·6	63·6	–	94·4	68·0	82·5	89·7	77·9
1936	68·4	78·7	67·7	–	96·3	71·5	82·0	86·9	79·4
1937	79·7	89·9	72·1	–	114·5	93·6	82·8	95·1	89·8
1938	68·8	75·9	61·2	–	113·7	72·7	84·1	84·5	83·1

Section 2.—Retail Prices and Cost of Living.

Collection of data and calculation of index numbers of retail prices and the cost of living are carried out in co-operation by the Dominion Bureau of Statistics (Department of Trade and Commerce) and the Department of Labour. Resultant series of index numbers are computed from different points of view. Index numbers of retail prices and cost of living, issued by the Bureau, have for their object the measurement of the general movement of such prices and costs in the Dominion as a whole, and are so calculated as to make comparisons possible with other general index numbers constructed on similar principles, for example, the index of wholesale prices. Calculated, as they are, on the aggregative principle, *i.e.*, the total consumption of each commodity, the Bureau's index numbers afford an excellent measurement of changes in the average cost of living in the Dominion as distinguished from that of any particular class or section.

The computations of the Labour Department are designed to show changes in the cost of living for workmen in cities. They are thus more limited in scope and far more restricted in application than the Bureau of Statistics index. As a development of retail prices and cost of living studies, investigations into the living expenditures of families in representative cities have been made by the Bureau of Statistics. These supplement the general index numbers and serve as a very good guide to changes in cost of living between different cities and in different parts of the country. This Section is divided into three subsections: Subsection 1 dealing with general index numbers of retail prices and services; Subsection 2, which summarizes the Bureau's recent investigation into the family living expenditures of wage-earners in 12 representative cities of Canada; and Subsection 3 with cost of living of wage-earners (this material formerly appeared as Sec. 3 of Part II of the Labour and Wages chapter).

Subsection 1. The Bureau of Statistics Index Numbers of Retail Prices and Services.

In the Bureau's index, 1926 is taken as the base year and is represented by 100 to bring it into conformity with other series of index numbers shown in this chapter. A description of the system of weighting of individual items, sub-groups, and groups, and of the method of construction of this index number is given at pp. 812-818 of the 1931 Year Book. As will be seen from Table 9, the general cost of living index moved up from 83·1 in 1937 to 84·0 in 1938, continuing the upward trend apparent after July, 1933. Higher prices ruled in all groups. The monthly index for living costs fluctuated during 1938 between 84·8 and 83·5.

9.—Index Numbers of Retail Prices, Rents, and Costs of Services (on the 1926 Base), 1926-38 and by Months, 1937, 1938, and January-April, 1939.

Note.—Statistics for 1913-25 are given at p. 820 of the 1938 Year Book. Monthly figures prior to 1937 will be found in the corresponding table of previous editions of the Year Book.

Year.	Food Index.	Fuel Index.	Rent Index.	Clothing Index.	Sundries Index.	Total Index.
1926	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**	**100·0**
1927	**98·0**	**97·9**	**98·8**	**97·5**	**99·1**	**98·4**
1928	**98·6**	**96·9**	**101·2**	**97·4**	**98·8**	**98·9**
1929	**101·0**	**96·4**	**103·3**	**96·9**	**99·0**	**99·9**
1930	**98·6**	**95·7**	**105·9**	**93·9**	**99·4**	**99·2**
1931	**77·3**	**94·2**	**103·0**	**82·2**	**97·4**	**89·6**
1932	**64·3**	**91·4**	**94·7**	**72·3**	**94·6**	**81·4**
1933	**63·7**	**87·7**	**85·1**	**67·1**	**92·6**	**77·5**
1934	**69·4**	**87·7**	**80·1**	**69·7**	**92·1**	**78·6**
1935	**70·4**	**86·8**	**81·3**	**69·9**	**92·2**	**79·1**
1936	**73·4**	**86·4**	**83·7**	**70·5**	**92·8**	**80·8**

9.—Index Numbers of Retail Prices, Rents, and Costs of Services (on the 1926 Base), 1926-38 and by Months, 1937, 1938, and January-April, 1939—concluded.

Year and Month.	Food Index.	Fuel Index.	Rent Index.	Clothing Index.	Sundries Index.	Total Index
1937.						
January	75·2	85·8	84·9	71·6	92·8	81·8
February	75·6	85·8	84·9	71·6	92·9	81·9
March	75·7	85·8	84·9	72·6	93·1	82·2
April	76·3	85·8	84·9	72·6	93·1	82·4
May	76·6	85·3	87·3	72·6	93·2	82·9
June	76·4	83·4	87·3	72·9	93·5	82·9
July	77·2	83·2	87·3	72·9	93·5	83·1
August	79·1	83·9	87·3	72·9	93·5	83·7
September	78·3	83·9	87·3	73·3	93·7	83·6
October	78·9	84·8	89·0	73·3	93·7	84·2
November	78·8	85·1	89·0	73·3	93·7	84·2
December	79·1	85·5	89·0	73·3	93·7	84·3
1937 Averages	**77·3**	**84·9**	**86·9**	**72·7**	**93·4**	**83·1**
1938.[1]						
January	78·4	85·6	89·0	73·3	93·7	84·0
February	77·9	85·4	89·0	73·3	93·7	83·9
March	78·6	85·7	89·0	73·7	93·7	84·2
April	78·8	85·7	89·0	73·7	93·7	84·2
May	77·7	85·3	90·3	73·7	93·7	84·1
June	78·1	84·5	90·3	73·0	93·6	84·0
July	78·4	84·4	90·3	73·0	93·6	84·1
August	80·7	84·6	90·3	73·0	93·6	84·8
September	77·6	84·8	90·3	73·4	93·6	84·0
October	77·1	85·1	90·1	73·4	93·6	83·8
November	76·6	85·5	90·1	73·4	93·6	83·7
December	76·2	85·7	90·1	72·8	93·6	83·5
1938 Averages	**78·0**	**85·2**	**89·8**	**73·3**	**93·6**	**84·0**
1939.[1]						
January	75·2	85·7	90·1	72·8	93·5	83·1
February	74·5	85·5	90·1	72·8	93·5	82·9
March	74·5	85·4	90·1	72·8	93·4	82·9
April	74·5	85·2	90·1	72·8	93·5	82·9

[1] Subject to revision.

The tables formerly published in the Year Book, which showed the prices of a family budget of staple foods, fuel, rent, etc., and annual index numbers of the cost of living, on the 1913 base, by provinces, have been omitted from this edition, due to pressure upon Year Book space. Annual figures on this base will be found in the Bureau's report "Prices and Price Indexes", while monthly ones are published in the *Labour Gazette*, and, in part, in the monthly bulletin on prices and price indexes.

It will be noticed that the general index described above takes within its orbit costs of services as well as retail prices of commodities. Services are in fact a very considerable item in the cost of living of the average family, and special studies have been made from time to time by the Bureau of Statistics covering the most important services which affect the family budget.

Thus, information with regard to street-car fares, rates for manufactured and natural fuel gas for domestic consumption (which is mostly a service charge), and domestic electric light and telephone charges, was published at pp. 801-804 of the 1927-28 Year Book. Detailed information for intervening years regarding such services will be found at pp. 114-125 of the Annual Report on Prices and Price Indexes, 1913-37, issued by the Dominion Bureau of Statistics.

Prices of Services.—This later information indicates that the prices of manufactured fuel gas, after showing a downward tendency between 1926 and 1936, reversed direction and recorded a moderate rise, the Dominion index number for

1937 being 94·5, as compared with 93·6 in 1936. The index number of the price of natural fuel gas declined from 100·0 in 1926 to 92·5 in 1930, rose again to 94·3 in 1932, then declined to 92·3 in 1936 and 1937. On the other hand, telephone rates have shown a distinct increase, the Dominion index number of domestic telephone rates having risen from 100·0 in 1926 to 107·4 for 1933-37. Again, the business telephone rate has risen from 100·0 in 1926 to 118·5 for 1933-37.

Hospital Charges.—Special investigations on hospital charges are now made annually by the Dominion Bureau of Statistics and the results are given as Dominion averages in the following table. In general, this shows that hospital charges in 1930 were 94 p.c. above the 1913 level. From 1930 to 1935 rates gradually declined to less than 88 p.c. above those in 1913, then rose slightly in 1936 and 1937. Operating room charges have not increased at the same rate as room charges, being approximately 54 p.c. above those in 1913, while the latter averaged more than 90 p.c. higher. The cost of maintaining patients in hospitals declined more than 11 p.c. between 1930 and 1934, then gradually rose by almost 4 p.c. during the next three years.

The detailed results of this investigation, including the statistics by provinces, are given at pp. 115-119 of the Annual Report on Prices and Price Indexes, 1913-37, issued by the Dominion Bureau of Statistics.

10.—Average Daily Hospital Charges in Canada and Index Numbers Thereof (on the 1913 Base), 1913 and 1930-37.

NOTE.—Statistics for 1922-29 are given at p. 828 of the 1938 Year Book.

Item.	1913.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Public wards..........$	0·99	2·04	2·03	2·03	1·99	1·98	1·98	1·99	2·04
Index numbers..........	100·0	204·5	204·1	204·1	200·6	199·1	199·5	200·1	204·8
Semi-private rooms.....$	1·57	2·89	2·89	2·85	2·82	2·80	2·79	2·79	2·81
Index numbers..........	100·0	190·4	190·2	188·0	185·8	184·8	183·7	183·9	185·0
Private rooms..........$	2·68	5·24	5·23	5·11	5·06	5·06	5·01	5·01	5·03
Index numbers..........	100·0	194·9	194·5	190·2	188·1	187·2	186·4	186·4	187·0
Operating room.........$	5·16	8·36	8·33	8·23	8·14	8·10	8·09	8·04	8·03
Index numbers..........	100·0	160·1	159·7	157·6	156·1	155·1	155·0	154·0	153·9
Costs of maintenance per head...............$	1·68	3·63	3·58	3·44	3·25	3·22	3·23	3·23	3·33
Index numbers..........	100·0	211·2	207·8	199·9	189·0	187·2	188·0	188·2	193·8

Subsection 2.—The Nutrition and Family Living Expenditures Investigation.[*]

To examine possibilities for meeting the need for definite information in respect to nutrition and family living expenditures, especially in urban centres, an interdepartmental committee was organized in 1937. On this committee were representatives from the Bureau of Statistics, the Department of Pensions and National Health, the Department of Labour, and the National Research Council. Following recommendations by this committee, Parliament made a vote to the Bureau of Statistics for the purpose in 1938.

At June 15, 1939, the Bureau of Statistics had completed a survey of family living expenditures in the 12 cities of Charlottetown, Saint John, Halifax, Quebec, Montreal, Ottawa, Toronto, London, Winnipeg, Saskatoon, Edmonton, and Vancouver. The statistics cover the 12 months ended Sept. 30, 1938. The sample families were selected from those with certain characteristics which make them typical of Canadian wage-earner homes. Both parents and one or more children were present in each home, and in some cases one lodger or a domestic also lived with the family. Earnings in the samples ranged from $450 to $2,500 per annum. It was found that family incomes tended to centre between $1,200 and $1,600—the proportion receiving less than $1,200 being larger than the proportion receiving above $1,600. Of the 1,439 families from which records were received, 1,135 were families of British origin in the cities mentioned, 211 were French families in Montreal and Quebec, and 93 were families of other racial origins in Montreal and Winnipeg. Table **11** gives summary results for the 1,135 British families and the 211 French families separately.

---

[*] Revised by H. F. Greenway, M.A., Prices Statistician and Officer in Charge of the Nutrition and Family Living Expenditures Investigation, Dominion Bureau of Statistics.

In addition to the main information as to family expenditures, certain other questions were asked, the replies to which throw light upon some family characteristics at progressive income levels. These are summarized in the statement below.

FAMILY CHARACTERISTICS AT PROGRESSIVE INCOME LEVELS.

Item.	British Families with Incomes of—									
	$400-799.	$800-999.	$1,000-1,199.	$1,200-1,399.	$1,400-1,599.	$1,600-1,799.	$1,800-1,999.	$2,000-2,399.	$2,400+.	Total.
Families...............No.	45	108	184	236	212	118	91	100	41	1,135
Persons per family..... "	4·5	4·3	4·4	4·3	4·3	4·3	4·6	4·7	4·6	4·4
Children per family.... "	2·4	2·2	2·3	2·2	2·2	2·2	2·4	2·4	2·4	2·3
Rooms per person...... "	1·0	1·1	1·1	1·1	1·2	1·3	1·2	1·3	1·3	1·2
Families with motor cars.................p.c.	4·4	24·1	13·0	32·2	38·2	42·4	41·8	55·0	63·4	33·2

Item.	French Families with Incomes of—					
	$400-799.	$800-1,199.	$1,200-1,599.	$1,600-1,999.	$2,000+.	Total.
Families...............No.	27	62	68	34	20	211
Persons per family...... "	4·2	4·9	5·1	6·6	6·9	5·3
Children per family.... "	2·1	2·8	2·9	4·4	4·9	3·2
Rooms per person...... "	0·9	0·9	0·9	0·8	0·9	0·9
Families with motor cars.................p.c.	7·4	Nil	11·8	23·5	15·0	10·0

Preliminary results of the survey show that remarkable similarity prevails in the proportions of income spent upon the more essential budget items in different areas of the Dominion. On the average about two-thirds of the total expended each year goes for necessities. The widest difference is apparent in food purchases, which range from 25·3 p.c. for Charlottetown up to 32·4 p.c. for those families in Montreal of other than British and French origin. Food purchases tend to be higher in the larger cities. Proportion of expenditures devoted to the provision of shelter ranges from 15·1 p.c. in Charlottetown to 20·9 p.c. in Ottawa; fuel and light accounts for between 4·5 p.c. in Quebec city and 7·7 p.c. in Charlottetown; and clothing for 9·6 p.c. in Vancouver to 12·5 p.c. for Montreal families other than British and French.

Many factors affect expenditures for living needs. The amount of family income is generally considered the dominant influence, but income in turn is related to the age of the principal breadwinner, and the numbers and ages of children also affect the character of family living expenditures. The importance of any factor may be assessed by studying living expenditure tendencies when other factors are held constant and differences in expenditure patterns are examined in relation to variations in these factors separately. Such studies of tendency may be related, also, to typical as well as average conditions of income, family size, age, etc. It is desirable to have a clear-cut picture of living expenditure patterns of the more numerous family types which are to be found in the community. In the studies which the Bureau is making, living expenditure records are shown grouped according to three principles of classification with a view to examining the relationships between living expenditures and the factors in family composition noted above, *viz.*, number of children in the family, age of the father, and principal types of families. Certain results of the preliminary analyses are summarized here:—

Summary of Results.—There appeared to be no general tendency in urban wage-earner families of British origin for the number of children to increase in the higher family income groups, although in French families the average number of children was larger at higher income levels.

There seemed to be a significant relationship between the rise in average expenditure levels of two-children British wage-earner families over those with one child, but average expenditures for two-, three- and four-children families showed only minor differences, and averages for five-children families dropped back sharply to very near the one-child family expenditure level. Average expenditures of French families covered by the survey moved steadily upward as the number of children increased.

In both racial origin groups, amounts spent per person declined as the number of children in the family increased. Average expenditure per person dropped from $516 in British families with one child to $212 in households with five children. Corresponding averages from French families were $397 and $219. All budget groups contributed to this decline, with food outlay per person falling from $127 to $74 for British families and from $109 to $75 for French families with one and five or more children, respectively.

A different picture was obtained when expenditure records were classified according to the age of the father. The number of children per family tended to increase until the father's age was somewhere between 45 and 54, and amounts spent per person on food and clothing increased slightly as the age of the father moved upward into that range. This was associated with a more rapid rise in income than in numbers of children at progressive age levels of the father.

Analyses of records for living expenditure tendencies related to numbers of children and the length of time the family had been formed, did not reveal the existence of a "typical" family. Families with one child under 13 years, or with two children from 4 to 12 years apparently possess some claim to this title, but contrary to popular opinion, families with three children form a definite minority. The tendency already noted, for income to increase as the family life span lengthened was apparent in family groups with the same number of children. The earnings of older children were partly responsible for this increase. For families with the same number of children, expenditures on food and clothing mounted as the family life span extended but not by the full amount of the income increase. Housing and household furnishing expenditures actually declined as the number of children increased. Most other budgetary outlays showed very little relation either to rising income or the lengthening family life span. Apparently a wide diversity in consumer tastes exists, which is scattered fairly evenly among "non-necessity" expenditures such as recreation, transportation, and savings.

11.—Average Distribution of Family Expenditures, by Income Groups.

Note.—The total average amounts of expenditure shown are in some cases greater than the maximum of the salary group, because savings from annual income have been treated as items of expenditure, and considerable credit is utilized by wage-earner families. The matters of purchases made from previous savings and by trade-in allowances also enter into the picture.

Budget Group.	BRITISH FAMILIES.									
	Income Groups and Amounts Expended.									
	$400 -799.	$800 -999.	$1,000 -1,199.	$1,200 -1,399.	$1,400 -1,599.	$1,600 -1,799.	$1,800 -1,999.	$2,000 -2,399.	$2,400+.	Total.
	$	$	$	$	$	$	$	$	$	$
Food	288	351	380	419	442	473	508	517	578	433
Housing	165	187	224	254	283	324	315	396	420	276
Capital expenditure on home	Nil	4	2	10	11	8	12	23	20	9
Fuel and light	70	78	84	94	103	110	116	139	142	101
Clothing	62	93	120	147	165	187	217	253	260	160
Household operation	5	8	13	21	30	38	48	60	74	29
Furniture	36	47	72	82	99	107	134	128	176	92
Health	25	41	60	59	70	77	86	94	95	67
Personal care	13	16	20	23	26	28	30	34	35	24
Transportation	12	35	39	73	90	125	143	182	306	93
Recreation	39	49	62	83	102	114	128	139	179	93
Savings	43	69	84	121	143	176	218	307	362	150
Children's education and vocation	6	7	12	14	19	29	36	40	51	21
Community welfare and gifts	11	15	24	32	43	52	71	72	106	42
Totals	**775**	**1,000**	**1,196**	**1,432**	**1,626**	**1,848**	**2,062**	**2,384**	**2,804**	**1,590**
Numbers of families	*45*	*108*	*184*	*236*	*212*	*118*	*91*	*100*	*41*	*1,135*

Budget Group.	FRENCH FAMILIES.					
	Income Group and Amounts Expended.					
	$400-799.	$800-1,199.	$1,200-1,599.	$1,600-1,999.	$2,000+.	Total.
	$	$	$	$	$	$
Food	275	368	446	571	698	445
Housing	167	211	246	287	377	245
Capital expenditure on home	Nil	Nil	2	Nil	Nil	Nil
Fuel and light	50	61	74	87	95	71
Clothing	73	130	167	257	334	175
Household operation	12	13	26	40	53	25
Furniture	76	98	129	118	172	115
Health	13	55	73	77	106	64
Personal care	13	17	22	29	34	22
Transportation	13	22	43	107	63	45
Recreation	30	57	74	107	121	73
Savings	57	103	146	190	244	138
Children's education and vocation	3	7	18	49	80	24
Community welfare and gifts	12	18	29	35	50	27
Totals	**794**	**1,160**	**1,495**	**1,954**	**2,427**	**1,469**
Numbers of families	*27*	*62*	*68*	*34*	*20*	*211*

The following bulletins, resulting from the study, may be obtained from the Dominion Statistician: (1) a 2-page preliminary bulletin for each of the 12 cities; (2) a 2-page preliminary bulletin summarizing the results of the investigation; (3) a 9-page bulletin showing Dominion averages and averages by cities and by English- and French-speaking families; (4) a 14-page preliminary detailed analysis of family living expenditures in Canada. Other bulletins and reports are in course of preparation.

Subsection 3.—Cost of Living of Wage-Earners.*

An index number of the cost of living in working-men's families has been computed by the Department of Labour since 1913, and is published monthly in the *Labour Gazette*. This index is specifically designed for the purpose of measuring the trends of the cost of living for certain wage-earning classes with a somewhat lower standard of living than that which is measured by the Bureau of Statistics index number of retail prices, shown on pp. 860-861 of the present volume. It is constructed from family budgets, principally a weekly family budget of staple foods, fuel, and rent which has been published monthly in the *Labour Gazette* since 1915 and annually since 1911; in addition, figures are included for clothing and sundry items and further data for fuel, light, and rent. The Labour Department aims, by this method, to have a basis for computation that can be readily applied to the data for any given locality or district at any time, or for any class of labour—for instance, coal miners, who usually do not live in cities. This index is used extensively in negotiations as to wage rates and in the settlement of industrial disputes. An abridgment of the index is presented in Table **12**.

---

* Revised under the direction of W. M. Dickson, Deputy Minister of Labour.

12.—Changes in the Cost of Living of Wage-Earners in Canada, 1929-36, and for stated months, 1937 and 1938.

(Average prices in 1913=100.)

NOTE.—Comparable statistics for December, 1914-28, will be found at p. 811 of the 1938 Year Book.

Year and Month.	Food.	Fuel and Light.	Rent.	Clothing.	Sundries.	All Items.[1]
1929 December	161	157	158	156	166	160
1930 "	138	156	160	148	165	151
1931 "	107	152	158	127	163	135
1932 "	96	145	141	114	161	125
1933 "	100	142	129	113	157	123
1934 "	103	144	129	115	154	123
1935 "	111	141	132	115	154	127
1936 "	114	142	135	115	154	128
1937—						
March	116	141	135	117	154	129
June	116	138	140	117	154	130
September	119	138	140	118	155	131
December	120	140	142	118	157	133
1938—						
January	118	140	142	118	156	132
February	117	140	142	118	156	132
March	118	140	142	119	156	132
April	118	140	142	119	156	132
May	116	140	144	119	156	132
June	117	139	148	118	156	132
July	117	139	148	118	156	132
August	120	139	148	118	156	134
September	116	139	148	118	156	132
October	115	140	148	118	156	132
November	114	141	148	118	156	132
December	113	141	148	117	156	131

[1] The figures for "All Items" were calculated by giving the following weights to each group: food, 35 p.c.; fuel, 8 p.c.; rent, 18½ p.c.; clothing, 18½ p.c.; sundries, 20 p.c.

Section 3.—Index Numbers of Security Prices.

Security prices have long been utilized in statistical measurements related to economic phenomena. They are extremely sensitive to changing business conditions, although this valuable characteristic is sometimes overshadowed by the fact that their movements may be greatly influenced by speculative interest very remotely associated with underlying economic conditions. Thus in 1928 and 1929, common stock prices advanced far beyond levels indicated by business profits and prospects.

The behaviour of Canadian common stock prices has been quite different from that of commodity prices since pre-War years. There was no advance in security markets during the Great War paralleling the pronounced inflation in commodity values. Between 1926 and 1929, however, when commodity prices were declining gradually, common stocks more than doubled in price. Both sets of prices recorded a sharp drop between 1929 and 1933, and both have shown recovery subsequently. This has been much more pronounced in the case of security prices.

Investors Index Numbers of Common Stocks.—International events appeared to be the dominating force behind major security price movements in 1938 and, as successive crises were weathered, swift declines were followed by equally sharp rallies. There were two outstanding political crises in 1938 and these were both clearly reflected in security price indexes, the first occurring prior to the union of Germany and Austria on Apr. 1, and the second during the Sudeten dispute in September. Except for these two periods Canadian stock exchange prices pursued a much steadier course than in 1937. The Bureau's general index of 95 common stocks entered 1938 on a rising tide, continuing the advance inaugurated in the third week of October, 1937. It was not until October, 1938, however, that the general index moved above corresponding 1937 levels. At the end of the year it was 6·5 p.c. higher than the 1937 close.

Opening at 102·2, the daily index for 95 common stocks rose rapidly to a 'plateau' between 106 and 110, where it remained for almost two and a half months. The first major decline then commenced, and by the end of March the index had been swept down to a 1938 low of 87·9. Following this period an irregular rally set in which reached its greatest momentum during the latter part of June and early July, carrying the index back close to 108 on July 19. This advance was terminated by increasing European tension which was not eased until the Munich Accord was signed on Sept. 29. Indexes immediately rebounded from the low levels then ruling and the daily general index reached a 1938 high of 112·8 on Nov. 12. This gain was not all held and at the year's close the index had receded to 108·7. Practically all gains during the year were confined to the industrial section, and special mention might be made of the rapidly advancing prices of shares included in machinery and equipment, building materials, and industrial mines sub-group indexes. This was particularly noticeable during the latter half of the year and reflected to a considerable extent the impetus given by rearmament programs. Food and beverage sub-groups registered a considerable net gain for the year, while the textile index showed the only recession in the industrial section.

Among the utilities the telephone and telegraph sub-group, influenced largely by Bell Telephone, was the only one to register an advance during 1938. Transportation and power groups showed weakness, the former recording a new low for the past 25 years.

Bank shares were not subjected to the same sharp price reactions as other issues, though the undertone for the first six months was noticeably easier as indicated by the daily index for this series, which moved down 2·2 points to 80·5 in the third week of June. The mid-year rally, previously mentioned, advanced the index about 5 points in July and it remained close to that level for the balance of the year, closing at 83·8, slightly higher than the corresponding figure at the end of 1937.

13.—Investors Index Numbers of Common Stocks (on the 1926 Base), by Months, 1938.

NOTE.—Figures for 1935 are given at p. 816 of the 1936 Year Book, for 1936 at p. 803 of the 1937 Year Book, and for 1937 at p. 825 of the 1938 edition; those for earlier years will be found in the corresponding table of earlier editions.

Month.	Grand Total.	Types of Stocks.										
		Banks, Total.	Industrials.									
			Industrials, Total.	Machinery and Equipment.	Pulp and Paper.	Milling.	Oils.	Textiles and Clothing.	Food and Allied Products.	Beverages.	Building Materials.	Industrial Mines.
January....	107·7	84·3	177·0	109·6	18·9	87·2	194·9	64·3	158·7	116·1	138·4	422·6
February...	107·1	81·8	177·7	109·3	17·5	88·9	195·2	64·8	159·9	115·0	131·4	425·0
March......	99·2	80·5	164·0	100·7	14·6	76·5	181·2	60·3	152·0	101·3	116·0	387·3
April.......	97·9	80·4	160·5	103·2	15·4	75·6	172·0	55·0	151·5	106·0	119·4	386·6
May........	99·7	80·9	163·5	107·2	15·7	85·8	177·2	54·5	153·6	107·5	122·5	389·2
June........	100·0	81·0	163·5	111·8	18·6	84·8	170·0	54·1	156·2	109·2	129·8	395·2
July........	106·9	84·9	175·1	129·2	23·1	88·6	177·6	59·4	167·9	120·5	142·6	433·0
August.....	105·2	85·0	172·8	130·1	21·0	88·3	176·7	59·0	168·5	122·1	139·3	421·1
September .	98·6	83·4	162·2	120·6	17·5	78·4	165·0	54·3	162·2	108·8	121·2	401·0
October....	109·7	86·0	182·7	139·8	22·8	85·8	182·1	58·5	170·1	133·3	139·5	467·9
November..	110·4	85·6	184·9	141·5	21·6	84·9	184·5	59·0	170·2	143·3	141·5	466·1
December..	106·8	83·9	179·4	135·5	19·3	78·8	176·9	56·9	170·1	135·9	140·2	459·3

Month.	Types of Stocks.			
	Public Utilities.			
	Public Utilities Total.	Transportation.	Telephone and Telegraph.	Powers and Traction.
January	48·4	19·2	125·6	64·4
February	46·8	17·6	123·1	63·1
March	43·1	14·5	120·1	58·2
April	43·7	15·4	117·0	59·7
May	44·5	14·8	122·8	61·0
June	45·1	15·7	123·8	61·2
July	48·6	18·3	123·7	66·4
August	47·1	16·7	125·3	64·3
September	42·7	14·1	121·1	57·8
October	46·9	16·5	125·8	64·0
November	46·2	16·4	126·8	62·3
December	44·0	14·3	127·3	59·4

Preferred Stocks.—Preferred share price fluctuations generally paralleled common stock price movements during 1938. In December, 1938, the preferred index stood at 86·9, which was 7·3 p.c. higher than the corresponding level in December, 1937. A general index for 95 common stocks moved up 6·5 p.c. during the same interval, indicating that the relative position between these two series had shown practically no net change during the past year. The preferred stock index touched a 1938 low of 77·5 in March while the highest level of 88·0 was attained in October. The range between the 1938 high and low points was much narrower than in the previous year, the actual amounts being 13·8 p.c. and 27·3 p.c., respectively.

14.—Index Numbers of 25 Preferred Stocks (on the 1926 Base), by Months, 1927, to May, 1939.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1927	102·1	102·5	102·7	102·6	102·5	102·1	102·5	103·8	104·8	107·8	110·8	111·8
1928	111·5	110·9	109·9	111·4	111·7	111·2	110·3	107·5	107·6	106·2	104·0	107·9
1929	107·4	108·1	106·8	104·3	104·3	104·8	104·8	105·6	105·1	102·9	99·8	100·4
1930	97·9	98·8	100·0	103·4	102·6	99·5	97·4	97·1	96·2	85·4	81·9	82·5
1931	83·2	83·4	84·2	78·8	73·8	72·6	71·8	69·1	64·2	63·9	66·5	63·0
1932	57·2	58·8	58·0	55·4	48·4	45·2	49·5	52·9	53·4	52·9	52·2	50·2
1933	49·6	49·6	47·3	47·2	54·6	58·5	61·9	61·7	61·0	59·7	59·1	60·2
1934	64·1	66·5	67·3	68·5	68·7	68·4	68·1	67·3	67·4	69·5	70·6	71·4
1935	73·5	73·8	71·2	69·2	68·4	68·4	69·6	70·9	69·2	69·5	72·5	73·8
1936	74·9	77·2	76·3	76·0	74·6	76·2	79·5	80·6	83·8	85·8	91·1	93·9
1937	99·2	100·4	102·6	103·1	100·2	99·3	99·4	101·5	91·0	82·2	82·0	81·0
1938	83·4	82·1	77·5	78·2	80·1	81·8	87·2	86·8	81·3	88·0	87·5	86·9
1939	85·0	84·4	83·9	78·9	79·0	–	–	–	–	–	–	–

Weighted Index Numbers of Mining Stocks.—The course of mining stock price indexes was broadly similar to the pattern shown by industrials and utilities except that fluctuations in the former were much sharper. The general index for 24 mining issues closed the year at 161·5 or 17·7 p.c. above the December, 1937, close. Most of the increase came in the final quarter and was due almost entirely to the advance in base metal shares.

Gold shares during 1938 were unusually quiescent in comparison to previous years. An index for this sub-group reached a yearly high of 126·6 on Feb. 1 while the low of 101·6 was recorded on Mar. 18. There was a stronger rally through the spring and early summer, but with the reappearance of European tension, the gold index broke to a secondary low of 104·7 on Sept. 26. A swift recovery moved it to 120 on Sept. 30 and during the next three months the range of fluctuations did not exceed 3 p.c. Actual net appreciation between the close of 1937 and 1938 amounted to 4·5 p.c.

Base metal shares, while subjected to the same relapses as the golds, nevertheless recovered from each decline to reach successively higher levels until, at the close of 1938, the base metal index was 48·3 p.c. higher than at the close of 1937. The improving industrial situation, combined with heavy rearmament orders, had an especially stimulating effect on base metals.

15.—Weighted Index Numbers of Prices of Mining Stocks (on the 1926 Base), by Months, 1937, to May, 1939.

Year and Month.	Gold.	Base Metal.	Total.	Year and Month.	Gold.	Base Metal.	Total.
1937.				1938—concl.			
January	137·5	329·6	174·6	April	110·5	229·5	133·9
February	139·4	344·8	177·2	May	114·1	243·0	139·5
March	133·0	340·5	172·6	June	119·2	259·5	145·8
April	120·0	288·0	154·1	July	119·8	282·1	151·1
May	111·3	269·3	142·1	August	123·8	289·2	156·0
June	105·9	255·0	134·7	September	113·6	269·8	144·0
July	109·2	278·9	141·8	October	121·3	308·2	157·4
August	112·5	287·4	146·2	November	121·1	319·3	159·6
September	103·5	224·5	127·6	December	121·6	313·0	159·0
October	104·3	192·4	121·6				
November	113·8	192·4	129·4	**1939.**			
December	115·5	213·1	134·3	January	121·4	307·0	158·0
				February	121·1	315·1	158·8
1938.				March	118·2	305·6	155·0
January	121·0	241·7	144·1	April	110·1	282·6	143·7
February	124·3	246·9	147·7	May	114·6	303·3	151·4
March	111·4	225·3	134·9				

Section 4.—Index Numbers of Bond Yields.*

Few economic statistics are of more significance than the net rates of return received on absolutely the safest securities, such as government bonds maturing on a fixed date. Interest rates naturally grade upward from the rates which the safest of possible borrowers has to pay, and from the fluctuations of that price an idea may be obtained as to the relation between the supply of, and the demand for, funds for investment.

The exceptional requirements of the War years turned the Dominion authorities to the internal market, a field which had hitherto served mainly the needs of the provinces and municipalities. To the latter, therefore, it is necessary to go for earlier historical records of long-term bond yields in the internal market. Province of Ontario issues covering the years from 1900 to date are available in this field, and were utilized for the first long-term bond yield index constructed by the Bureau of Statistics. The relatively long period for which these records have been preserved makes this series of considerable value. On pp. 805 and 806 of the 1937 Year Book a statement will be found bearing on the movements of Ontario bond yields since 1900. Since the War, however, the growing importance of Dominion financing in the domestic market has made it advisable to supplement the Ontario series with the Dominion index of bond yields shown in Table **16**.

Dominion of Canada bonds were materially firmer in 1938, reflecting to a considerable extent the abundance of idle funds seeking safe investment. Oversubscription of practically all Dominion offerings of refunding and loan issues was indicative of the large quantities of available funds. During the opening months of the year Dominion bond prices rose steadily, the index for this series touching a peak of 118·2 in May. European international events overshadowed the domestic situation during the summer months and the index reacted to 116·0 in September. A strong rally, following the September crisis, advanced the index to 117·7 in December where it showed a gain of 1·8 p.c. over the 1937 close. Provincial bonds were featured by the erratic fluctuations of Western maturities. Sharp advances in Manitoba, Saskatchewan, and Alberta issues during the early summer coincided with prospects of an exceptionally large grain crop. These gains were considerably reduced during the latter half of the year and at the close the relative position between Eastern and Western bonds was practically unchanged though both were somewhat firmer than in December, 1937.

---

* The index of Ontario long-term bond yields formerly shown may be found in the Bureau's monthly bulletin "Prices and Price Indexes", obtainable from the Dominion Statistician.

16.—Index Numbers of Dominion of Canada Long-Term Bond Yields (on the 1926 Base), by Months, 1929 to May, 1939.

NOTE.—Index numbers for 1919–28 are given at p. 829 of the 1938 Year Book.

Month.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.
January	97·3	102·1	93·9	112·7	96·3	93·2	70·9	72·4	64·6	66·3	62·1
February	98·3	101·4	93·6	112·2	96·0	91·0	73·2	70·8	68·4	65·4	61·9
March	102·3	101·1	91·9	109·1	97·7	86·1	71·4	69·9	72·7	64·7	61·1
April	100·9	99·3	90·0	109·8	96·6	83·8	72·2	69·5	73·2	63·7	63·0
May	100·2	98·4	89·3	109·3	95·0	81·8	71·4	68·8	71·0	61·7	62·4
June	104·0	98·2	88·3	111·7	93·3	82·1	73·4	66·9	69·3	61·8	–
July	104·0	98·0	88·3	107·5	93·5	80·1	72·1	65·1	69·0	62·7	–
August	102·0	95·9	88·3	100·5	92·2	77·8	71·6	63·2	68·1	62·7	–
September	102·8	93·9	95·5	98·7	92·4	77·2	79·8	63·1	68·3	65·3	–
October	103·7	93·6	105·2	96·2	93·5	79·3	78·9	66·2	69·7	63·2	–
November	103·3	93·6	107·7	98·5	94·3	77·2	74·5	65·1	68·8	61·5	–
December	101·4	93·9	111·7	99·4	95·1	71·3	75·5	64·1	67·4	61·8	–

CHAPTER XXI.—PUBLIC FINANCE.

The following treatment of public finance includes an outline of Dominion, provincial, and municipal finance in Canada, supported by the necessary detailed statistics, and closes with a brief discussion of the national wealth and national income of the Dominion as the basis of all public finance.

The great increase in Dominion expenditure since 1913 has been due partly to the Great War with the resulting burden of interest, pension charges, etc., and partly to railway expenditures and social services including, latterly, unemployment relief. Increases on a commensurate scale have also taken place during the same period in provincial and municipal expenditures. Thus, in their fiscal years ended 1937, the total ordinary expenditure of the nine Provincial Governments was $253,443,737 as compared with $53,826,219 in 1916, only 21 years before—an increase of over 371 p.c. (The aggregate interest payments of Provincial Governments rose from $7,817,844 in 1916 to $67,222,797 in 1937.) Again, in recent years, between 1924 and 1936, the aggregate tax receipts of the municipalities of Ontario have increased from $94,526,271 to $121,825,930 (comparable figures are not available for earlier years)—an increase of about 29 p.c. In Quebec the ordinary receipts of municipalities increased from $33,288,115 in 1915 to $79,471,242 in 1933—an increase of 139 p.c.; the 1934, 1935, and 1936 figures given in Table 37 are not comparable as explained in the footnote thereto. While taxation receipts in the Prairie Provinces and the Maritime Provinces, for those years for which comparable figures are available, do not show an upward trend, except in the case of Nova Scotia, the figures cover relatively recent years in the majority of cases, and in the Prairie Provinces a larger proportion of tax levies has remained uncollected. In British Columbia the taxes collected by the municipalities totalled $9,382,099 in 1917 and $17,070,680 in 1936.

Public Debt of Canada.—The latest year for which a figure for the aggregate public debt of Canada can be given is 1937. The statement below is summarized from the statistics given in the respective sections of this chapter, the guaranteed or indirect debt being shown separately. The figures with regard to provincial debt are for the respective fiscal years of the provinces ended in 1937, given on p. 917.

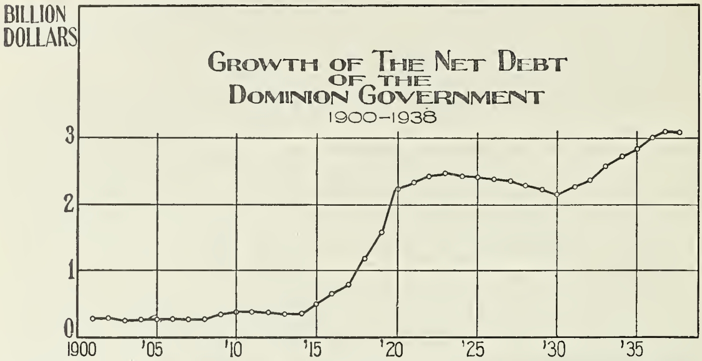
SUMMARY OF THE AGGREGATE PUBLIC DEBT OF CANADA (*CIRCA*) 1937.
(Dominion, Provincial, and Municipal Debt.)

		$	$
NET DIRECT DEBT—			
Net Debt of Dominion Government, Mar. 31, 1937		3,083,952,202	
Net Direct Liabilities Provincial Governments, 1937 (sinking funds and available capital, current and trust account assets deducted)		1,199,480,759	
Direct Liabilities all Canadian Municipalities, 1936 (less sinking funds and investments)		1,415,637,719	
TOTAL NET DIRECT DEBT			5,699,070,680
GUARANTEED OR INDIRECT DEBT—			
Dominion Government, Mar. 31, 1937—	$		
Principal and interest guaranteed on railway and other securities	787,128,667		
Interest only guaranteed on railway securities	216,207,142		
Other guarantees	209,111,482[1]		
		1,212,447,291	
Provincial Governments—individual fiscal years 1937		250,645,142	
TOTAL GUARANTEED OR INDIRECT DEBT			1,463,092,433
GRAND AGGREGATE PUBLIC NET DIRECT DEBT AND GUARANTEED OR INDIRECT DEBT OF CANADA			7,162,163,113

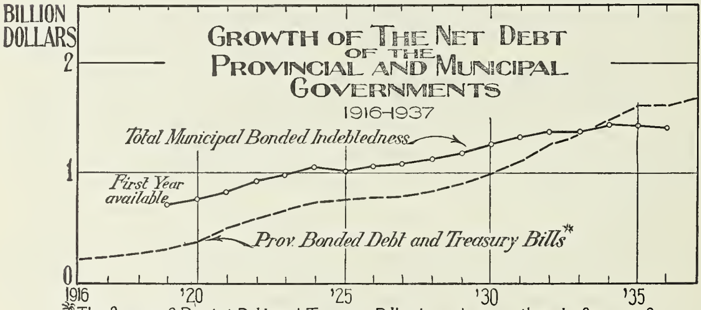
---

[1] Includes bank advances $8,220,067, British Columbia and Manitoba Treasury Bills $6,255,298, deposits of chartered banks in Bank of Canada $194,275,314. There is also an unstated amount guaranteed for the Winnipeg Grain and Produce Clearing Association, Limited, for day-to-day margins of the Canadian Wheat Board. There was also $60,000,000 authorized as a guarantee for bank advances *re* grain marketing for the Canadian Wheat Board against which no amount was shown as outstanding at Mar. 31, 1937.

PUBLIC DEBT OF CANADA



GROWTH OF THE NET DEBT OF THE DOMINION GOVERNMENT 1900–1938

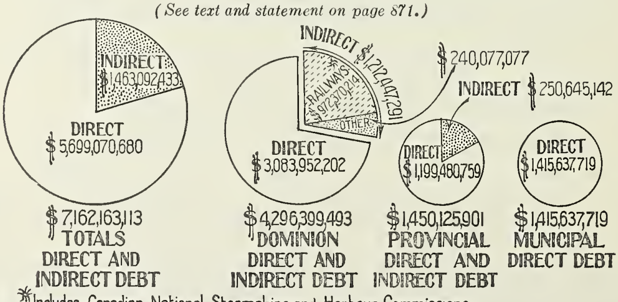


GROWTH OF THE NET DEBT OF THE PROVINCIAL AND MUNICIPAL GOVERNMENTS 1916–1937

*The figures of Bonded Debt and Treasury Bills shown here are the only figures of Provincial Debt comparable over the period shown

APPORTIONMENT OF AGGREGATE PUBLIC DEBT, DIRECT AND INDIRECT, OF CANADA 1937

(*See text and statement on page 871.*)



*Includes Canadian National Steamships and Harbour Commissions.

Section 1.—Dominion Public Finance.*

Historical Sketch.—Both under the French *régime* and in the earlier part of the British, the territorial or casual revenues of Canada, consisting of certain seigneurial dues and the proceeds of the sale of government timber and land, were reserved to the Crown, while the right of levying taxes and of regulating the trade and commerce of the colony was, after 1763, deemed to be vested in the British Parliament.

By the Quebec Act of 1774, certain duties on spirits and molasses were imposed, to be expended by the Crown in order to provide a revenue "towards defraying the expenses of the administration of justice and the support of the civil government of the province". A little later, in 1778, the British Government, by the Declaratory Act (18 Geo. III, c. 12), renounced forever the right of taxing the colonies to provide Imperial revenue, but maintained its claim to impose duties considered necessary for the regulation of trade, the proceeds to go towards defraying the expenditures of the colonial administration. After the Constitutional Act of 1791, the customs duties remained under the control of the Imperial Government, their revenue, as well as the territorial revenue above mentioned, coming in to the Executive Administration independently of the Legislative Assembly and thus making the Executive power largely independent of the Legislature. In case these revenues proved insufficient, recourse could generally be had to the grant made by the Imperial Government for the support of the army. As time went on, however, the Crown revenues became more and more inadequate to meet the increasing expenditure, while the wave of economy in the United Kingdom after 1815 made it impossible any longer to supplement these revenues from military sources. On the other hand, the purely provincial revenues collected under the authorization of the Provincial Legislature showed an increasing surplus. The power of the purse thus began to pass into the hands of the Legislatures; further, in 1831 the British Parliament passed an Act placing the customs duties at the disposal of the Legislatures.

Under the Act of Union, a consolidated revenue fund was established. All appropriation bills were required to originate in the Legislative Assembly, which was forbidden to pass any vote, resolution, or bill involving the expenditure of public money unless each had been first recommended by a written message of the Governor General. The British Government surrendered all control of the hereditary or casual revenues, which were thenceforth paid into the treasury of the province to be disposed of as its Legislature should direct.

At the interprovincial conference which took place prior to Confederation, it was decided that the new Dominion Government, which was to take over permanently, as its chief source of revenue, the customs and excise duties that had yielded the greater part of the revenues of the separate provinces (direct taxation being as unpopular in British North America as in other new countries), was also to assume the provincial debts and to provide out of Dominion revenues definite cash subsidies for the support of the Provincial Governments. (See Tables **22** and **23**.) Until the Great War, which made other taxes necessary, the customs and excise revenue constituted the chief resource of the Dominion Government for general purposes—the Post Office revenue and the Government railway receipts, which are not taxes at all, being mainly or entirely absorbed by the expenses of administering these services. Indeed, for many years preceding the War, customs and excise duties, together with the revenue from the head tax on Chinese immigrants, were the only items of receipts that were classified as taxes by the Department of Finance. In the last pre-War fiscal year these two items aggregated $126,143,275 out of total receipts on consolidated fund account amounting to $163,174,395, the Post Office and Government railways furnishing between them $26,348,847 of the remainder, offset, however, by expenditures on these two services amounting to $27,757,196. Miscellaneous revenue, largely fees, amounted in that year to $10,682,273—a comparatively small fraction of the total. As both customs and excise taxes were indirect, the average Canadian felt but little the pressure of taxation for Dominion purposes.

---

* Revised under the direction of Dr. W. C. Clark, Deputy Minister, Department of Finance, with the exception of those parts dealing with War tax revenue and inland revenue on pp. 886-895, which were revised by the Department of National Revenue.

The War enormously increased the expenditure, and this increase had in the main to be met by loans. It is, however, a cardinal maxim of public finance that, where loans are contracted, sufficient new taxation should be imposed to meet the interest charge upon the loans and to provide a sinking fund for their ultimate liquidation. This War taxation was begun in Canada within the first weeks of the War when, in the short War session of August, 1914, increases were made in the customs and excise duties on various commodities, including, coffee, sugar, spirituous liquors, and tobacco. In 1915 special additional duties of 5 p.c. *ad valorem* were imposed on commodities imported under the British preferential tariff and 7½ p.c. *ad valorem* on commodities imported under the intermediate and general tariffs, certain commodities being excepted. New internal taxes were also imposed on bank circulation, on the income of trust and loan companies, on insurance in other than life and marine companies, on telegrams and cablegrams, railway tickets, sleeping-car berths, etc., also on cheques, postal notes, money orders, letters, and post cards. In the following year, the business profits war tax (dropped in 1921)* was introduced, and in 1917 an income tax was imposed. In 1918 both of these taxes were increased and their application widened, and in 1919 the income tax was again increased, and still further augmented in 1920 by a surtax of 5 p.c. of the tax on incomes of $5,000 and over; the sales tax was also introduced in 1920. The cumulative result of these War taxes was that, in the fiscal year ended Mar. 31, 1921, customs duties were, for the first time, displaced from their position as the chief factor in Canadian revenue, the War taxes yielding $168,385,327, as against the customs yield of $163,266,804. This situation has remained true down to 1937 with the exception of the period between 1928 and 1931, when customs duties temporarily assumed their former position.

The importance which the sales tax has attained as a source of revenue will be seen from Tables **16** and **17**. When first introduced in 1920 the tax was 1 p.c. on sales but the rate has been varied from year to year and from May 2, 1936, has been 8 p.c. A statement appears at p. 836 of the 1938 Year Book showing the changes made from the inception of the tax up to 1938. A lesser, but still substantial, source of revenue is the special excise tax on importations, instituted in 1931, the changes in rates of which are shown in a second statement.†

Recent Modifications in the System of Taxation.—A more detailed sketch of the changes made in taxation from 1914 to 1926 will be found at pp. 755-759 of the 1926 Year Book, while similar information *re* tax changes in 1927 to 1929 is given at pp. 791-792 of the 1930 Year Book, for the years 1930 to 1935 at pp. 824-826 of the 1936 Year Book, and for 1936-38 at pp. 837-839 of the 1938 Year Book.

The 1938 Budget Speech, delivered by the Minister of Finance on June 16, 1938, introduced an important tax change in the form of an exemption from sales tax of the major products used in house construction. Other changes of a minor nature were made in the exemptions and rates of the gift tax; exemption of corporation income tax in respect to dividends received from wholly-owned non-resident subsidiary companies, if at least 75 p.c. of the combined capital of the parent and subsidiary companies is employed abroad and if the country in which the subsidiary is located grants a like exemption to parent companies in respect to subsidiaries in Canada; exemption from sales tax of feed for fur-bearing animals, harness, and materials for the repair of fishermen's boats. The special excise tax on tires and tubes as original equipment for automotive vehicles was also removed.

---

* Belated revenue from this tax has been collected in subsequent fiscal years down to 1933 (see Table **9**, p. 886.)

† Pursuant to changes made in the 1939 Budget, this tax now applies only to importations under the General Tariff, and hence in the future will be of small importance as a source of revenue.

No tariff changes whatsoever were introduced by the 1938 Budget. Instead, it was announced that the Government would postpone unilateral tariff action pending conclusion of the trade negotiations then in progress with the United States. The new Canada-United States Trade Agreement which resulted from these negotiations is dealt with on p. 468.

A statement at pp. 811-817 of the 1937 Year Book shows complete details of the Dominion tax system as of July, 1936, and statements at pp. 836-837 of the 1938 edition show changes made in the sales tax and in the special excise tax on importations since the inception of these taxes in 1920 and 1931, respectively.

Subsection 1.—The Current Balance Sheet of the Dominion.

A summary review of the current financial situation of the Dominion as at Mar. 31, 1934-38, is given in the balance sheet shown as Table **1**. This shows the figures for gross debt on Mar. 31, 1938, to have been $3,540,237,615, partly offset by active assets aggregating $438,570,044, leaving the net debt at $3,101,667,570. Non-active assets, including such public works as canals and railways, also loans to railways, amounted in the aggregate to $1,444,255,048, leaving a debit balance on Consolidated Fund Account on Mar. 31, 1938, of $1,657,412,522. The details of the various assets and liabilities are contained in the schedules accompanying the balance sheet and printed in the Public Accounts.

It should be noted that under the heading "Non-Active Assets", p. 876, the revision of the capital structure of the Canadian National Railways in 1938 resulted in the elimination of all loans made in previous years to the Canadian National Railways to cover deficits and the setting up of the new accounts shown for 1938. These latter represent the Government's present equity in the Railways (see p. 645 for further details). There is, therefore, no comparability between the 1938 figures and those for previous years as regards these items.

1.—Balance Sheets of the Dominion of Canada, as at Mar. 31, 1934-38.

NOTE.—Dashes indicate that the items were not applicable in the years so indicated.

Item.	1934.	1935.	1936.	1937.	1938.
	ASSETS.				
Active Assets—	$	$	$	$	$
Cash on hand and in banks..	9,874,579	16,296,697	20,243,808	26,239,458	8,297,389
Specie reserve..............	71,406,030	2,443,224	2,236,629	–	–
Bank of Canada, Class "B" shares....................	–	–	–	5,100,000	5,100,000
Railway accounts[1]..........	17,305,439	33,884,413	46,087,498	56,335,222	28,784,895
Advances to provinces, Harbour Commissions, Canadian Farm Loan Board, etc......................	191,920,713	175,034,198	223,788,091	231,014,250	253,296,776
Advances to foreign governments.....................	30,494,720	30,494,720	30,494,720	30,494,720	30,854,262
Soldier and general land settlement loans..........	45,219,132	44,648,325	43,594,540	42,477,774	42,232,502

---

[1] Included in "Miscellaneous current accounts" in earlier Year Books.

1.—Balance Sheets of the Dominion of Canada, as at Mar. 31, 1934-38—concluded.

Item.	1934.	1935.	1936.	1937.	1938.
	ASSETS—concluded.				
Active Assets—concluded.	$	$	$	$	$
Canadian Broadcasting Corporation—loans	-	-	-	-	500,000
Canadian National (West Indies) Steamships, Ltd.—loans	-	-	-	-	450,000
Miscellaneous current accounts	44,843,344	57,043,834	59,398,223	66,907,513	69,054,220
Totals, Active Assets	**411,068,957**	**359,845,411**	**425,843,509**	**458,568,937**	**438,570,044**
Balance of liabilities over active assets, being net debt, Mar. 31	2,729.978,140	2,846,110,958	3,006,100,517	3,083,952,202	3,101,667,570
Totals, Gross Debt	**3,141,042,097**	**3,205,956,369**	**3,431,944,026**	**3,542,521,139**	**3,540,237,614**
Non-Active Assets—					
Public works, canals	242,079,743	242,411,265	242,855,235	242,726,334	240,349,604
Public works, railways	443,182,346	442,884,582	442,910,909	443,109,941	429,690,834
Public works, miscellaneous	252,124,944	259,118,195	265,165,018	267,970,363	286,506,741
Military property and stores	12,035,420	12,035,420	12,035,421	12,035,420	12,049,714
Territorial accounts	9,895,948	9,895,948	9,895,948	9,895,948	9,895,948
Railway accounts (old)	88,398,829	88,398,829	88,398,829	88,398,829	62,791,435
Railway accounts (loans non-active)	655,527,456	655,527,455	655,527,455	655,527,456	[1]
Canadian National Railways security trust stock	[1]	[1]	[1]	[1]	269,325,706[1]
Canadian National Railways stock	[1]	[1]	[1]	[1]	18,000,000[1]
Canadian National Steamships (loans non-active)	15,353,467	15,840,634	15,507,970	13,754,191	13,858,030
Miscellaneous investments and other accounts (non-active)	75,960,711	77,192,578	79,621,230	100,482,811	101,787,036
Balance Consolidated Fund as at Mar. 31 of preceding year	811,417,164	935,419,276	1,042,806,052	1,194,182,502	1,250,050,909
Excess of expenditure over revenue, year ended Mar. 31	124,002,112	107,386,776	151,376,450	55,868,407	14,443,347
Charges authorized by Canadian National Railways Capital Revision Act, 1937	[1]	[1]	[1]	[1]	392,918,266[1]
Totals, Net Debt	**2,729,978,140**	**2,846,110,958**	**3,006,100,517**	**3,083,952,202**	**3,101,667,570**
	LIABILITIES.[2]				
Dominion notes in circulation	172,617,922	[3]	[3]	[3]	[3]
Bank Note Circulation Redemption Fund	6,486,355	6,696,471	6,857,942	7,019,898	5,967,227
Post Office account, money orders, postal notes, etc., outstanding	3,570,744	2,137,533	2,726,925	4,074,164	3,664,726
Post Office Savings Bank deposits	23,158,919	22,547,006	22,047,287	21,879,593	22,587,233
Insurance and superannuation funds	109,481,507	126,166,496	150,614,097	176,973,747	201,332,556
Trust funds	18,271,120	19,587,159	20,943,718	20,933,993	20,951,204
Contingent and special funds	4,441,481	5,625,412	6,044,065	13,597,412	21,853,040
Province accounts	9,623,817	9,623,817	9,623,817	9,623,817	9,623,817
Funded debt less sinking funds	2,791,706,560	3,011,713,862	3,211,347,008	3,285,066,671	3,252,577,884
Interest due and outstanding	1,683,672	1,858,613	1,739,167	3,351,844	1,679,928
Totals, Liabilities or Gross Debt	**3,141,042,097**	**3,205,956,369**	**3,431,944,026**	**3,542,521,139**	**3,540,237,615**

[1] See text on p. 875. [2] Direct liabilities only. Indirect liabilities or guarantees given by the Dominion of Canada are listed in Table 29, on pp. 905-906. [3] The Bank of Canada assumed liability for outstanding Dominion notes from Mar. 11, 1935.

Subsection 2.—Receipts and Disbursements.

The receipts of the Dominion Government on Ordinary Account for the fiscal year ended Mar. 31, 1938, were $510,297,581, an increase of $65,268,626 as compared with the previous year; besides these, special receipts amounted to $3,009,879 and other credits, including refunds to capital account and credits to non-active accounts, amounted to $3,385,289—a total revenue of $516,692,749. The regular expenditure on ordinary account was $414,891,410, while special expenditures amounted to $68,534,364. Under the category of "Government-Owned Enterprises", total disbursements amounted to $44,833,388, under "Capital Account" to $4,430,152, and under "Write Down of Assets" to $1,718,803. Thus total disbursements amounted to $534,408,117. There was an increase of $17,715,368 in the net debt (gross debt less active assets) during the year. (See Table **27** for interest-bearing debt.)

Detailed statistics of receipts and disbursements are contained in Tables **2** and **3**. Tables **4** and **6** are historical tables giving the figures of the main items of Dominion receipts and expenditures since Confederation, while Table **7** shows the per capita receipts and expenditures for these years, calculated on census and estimated populations. Per capita receipts and expenditures are given by principal items in Table **8**.

Changes in the Public Accounts, 1936.—Several important changes were made under various headings in the Public Accounts for 1936. On the revenue side "War and Demobilization Receipts", previously carried as "Special Receipts", were transferred to Ordinary Account (Casual Revenue). On the expenditure side several recurring items were also transferred from "Special" to "Ordinary", as follows: cost of loan flotations, representing flotation costs of new loans and annual charges for amortization of bond discount; the Government's annual contribution to the Superannuation Fund; the annual payment to maintain the reserve in the Government Annuities Fund; adjustment of War claims; and expenditures made under the Railway Grade Crossing Act. A new category was established under the heading "Government-Owned Enterprises", to cover expenditures incurred by the Government on account of the Canadian National Railways, the Canadian National Steamships, and various Harbour Commissions. Other major changes were the establishment of a separate category for Write-down of Assets, and transference of payment of Old Age Pensions from the Department of Labour to the Department of Finance.

In Tables **2**, **3**, and **8** the new classification of items has been adopted for the 1936, 1937, and 1938 figures and the figures for 1934 and 1935 have been adjusted to the new basis. The result is that the figures for each of the latter years as given in the tables do not conform with the figures shown in the Public Accounts for that same year, because of the new set-up after 1935, but the figures below are on a comparable basis throughout. Certain new items are introduced for 1938, but these do not affect the comparability of the figures of earlier years.

2.—Details of Revenue Receipts, fiscal years 1934-38.

Note.—See text above *re* adjustment of statistics for 1934 and 1935. Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1934.	1935.	1936.	1937.	1938.
Consolidated Fund Receipts—	$	$	$	$	$
Taxation—					
Customs	66,305,356	76,561,975	74,004,560	83,771,091	93,455,750
Excise duties	35,494,220	43,189,655	44,409,797	45,956,857	52,037,333
War Tax Revenue—					
Banks	1,335,546	1,368,480	1,280,933	1,209,894	1,106,859
Insurance companies	741,681	750,100	760,843	774,363	866,820
Income tax	61,399,172	66,808,066	82,709,803	102,365,242	120,365,532
Sales tax	61,391,400	72,447,311	77,551,974	112,832,259	138,054,536
Tax on cheques, transportation tax, etc	45,184,175	39,744,759	35,181,074	39,641,163	42,764,231
Tax on gold	-	3,573,383	1,412,825	-	-
Totals, Receipts from Taxation	271,851,550	304,443,729	317,311,809	386,550,869	448,651,061

2.—Details of Revenue Receipts, fiscal years 1934-38—concluded.

Item.	1934.	1935.	1936.	1937.	1938.
Consolidated Fund Receipts-concluded.	$	$	$	$	$
Non-Tax Revenue—					
Canada Grain Act	1,235,621	1,204,536	1,213,087	1,192,099	679,927
Canada Gazette	55,722	47,257	49,295	47,697	46,584
Canals	877,630	837,871	889,764	1,003,765	1,866,286
Casual	3,621,720	4,336,881	4,636,537	6,275,858	6,596,993
Chinese revenue	6,237	5,506	6,476	7,444	2,359
Dominion lands, parks, etc	418,729	516,389	457,680	478,133	540,841
Electricity inspection	440,290	484,498	542,101	646,117	692,361
Fines and forfeitures	177,812	89,806	294,674	134,389	208,988
Fisheries	39,508	42,935	42,104	55,656	60,443
Gas inspection	76,186	96,096	90,948	93,289	87,519
Insurance inspection	148,535	139,304	146,874	151,966	161,934
Interest on investments	11,148,232	10,963,478	10,614,125	11,231,035	13,120,523
Marine	207,532	218,437	221,673	263,260	336,163
Mariners' Fund	188,054	181,203	187,448	204,525	205,586
Military College	20,317	20,044	19,616	20,012	20,100
Military pensions revenue	165,207	173,794	178,408	186,515	194,150
Ordnance lands	17,855	15,819	15,685	15,451	16,437
Patent and copyright fees	429,341	425,677	454,762	463,850	452,150
Penitentiaries	97,962	73,765	67,683	62,324	62,820
Post Office	30,893,157	31,248,324	32,507,889	34,274,552	35,546,161
Premium, discount, and exchange (net)	-	751,491	35,600	-	26,911
Public works	249,721	254,158	251,273	274,431	317,835
Radio receiving licences	1,291,485	1,487,408	1,574,431	989,619	[1]
R.C.M.P. officers' pensions	12,444	9,202	10,807	10,195	10,570
Weights and measures inspection	399,717	407,303	401,457	395,904	392,879
Totals, Non-Tax Revenue	52,219,014	54,031,182	54,910,397	58,478,086	61,646,520
Totals, Consolidated Fund Receipts	**324,070,564**	**358,474,911**	**372,222,206**	**445,028,955**	**510,297,581**
Special Receipts—					
Sundry receipts and credits	409,271	3,397,169	319,833	8,463,997	3,009,879
Other Credits—					
Refunds on capital account	89,752	80,409	27,033	616,069	1,543,135
Credits to non-active accounts	91,003	21,275	26,924	44,726	1,842,154
Totals, Other Credits	**180,755**	**101,684**	**53,957**	**660,795**	**3,385,289**
Grand Totals, Receipts	**324,660,590**	**361,973,761**	**372,595,996**	**454,153,747**	**516,692,749**

[1] As from November, 1936, radio licence fees are deposited to the credit of the Canadian Broadcasting Corporation.

3.—Details of Expenditures, fiscal years 1934-38.

Note.—See text on p. 877 *re* new classification. Dashes in this table indicate that there were no expenditures under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1934.	1935.	1936.	1937.	1938.
Ordinary Expenditures—	$	$	$	$	$
Agriculture	6,995,768	7,106,535	9,399,311	8,741,070	9,016,839
Auditor General's Office	375,791	376,556	428,665	423,367	463,335
Civil Service Commission	221,096	220,787	258,688	304,921	358,252
External Affairs, including Office of Prime Minister	974,172	1,426,999	1,289,879	1,340,912	1,450,048
Finance—					
Interest on public debt	139,725,417	138,533,202	134,549,169	137,410,345	132,117,422
Cost of loan flotations	2,549,981	2,890,192	3,576,858	3,839,481	4,555,437
Subsidies to provinces	13,727,565	13,768,953	13,768,953	13,735,196	13,735,336
Special grants to provinces	1,600,000	1,600,000	3,975,000	3,225,000	7,475,000
Other grants and contributions	395,686	466,505	736,505	540,224	560,244
Superannuation	1,009,392	921,925	835,124	768,046	696,557
Government contribution to Superannuation Fund	1,985,564	1,947,495	1,874,964	2,018,754	2,065,491
Old age pensions	12,313,595	14,942,459	16,764,484	21,149,352	28,653,005
Premium, discount, and exchange (net)	167,026	-	-	399,930	-
Other departmental expenditure	3,152,063	3,939,064	3,734,888	3,578,449	3,652,961
Fisheries	1,596,453	1,640,562	1,710,345	1,690,610	1,849,619
Governor General's Secretary's Office	136,180	132,789	137,857	143,216	144,179
Insurance	151,934	156,397	162,798	171,658	186,725

3.—Details of Expenditures, fiscal years 1934-38—continued.

Item.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Ordinary Expenditures—concluded.					
Justice Department—					
Justice	2,434,400	2,410,414	2,454,869	2,502,594	2,507,432
Penitentiaries	2,676,505	2,667,340	2,376,651	2,371,932	2,577,319
Labor Department—					
Labour	560,706	581,215	659,577	720,376	705,859
Technical education	129,071	90,720	98,784	76,222	48,869
Government annuities—payments to maintain reserve	184,238	146,057	271,827	540,832	8,941,196[1]
Legislation—					
House of Commons	985,992	1,796,121	1,485,515	1,759,641	1,515,869
Library of Parliament	69,137	71,300	75,962	74,994	79,052
Senate	285,694	490,696	491,076	587,326	535,576
General	62,069	95,000	54,577	72,817	56,899
Dominion Franchise Office	–	1,545,283	498,208	52,593	76,240
Chief Electoral Office, including elections	31,544	146,220	1,089,464	71,820	44,609
Mines and Resources—					
Administration and general expenditure	–	–	–	–	1,857,868[2]
Immigration and Colonization	1,374,263	1,268,788	1,322,218	1,312,835	1,163,004
Indian Affairs	4,380,273	4,361,733	4,868,609	4,903,880	4,896,748
Interior					–
Lands, Parks, and Forests	2,856,583	2,749,828	2,938,997	2,887,354	1,542,790
Surveys and Engineering					933,387
Mines and Geological Survey	909,141	964,869	1,040,346	1,134,714	658,082
Movement of Coal and Domestic Fuel Act	2,771,787	2,123,971	2,102,631	2,276,735	2,520,922
National Defence—					
Militia Service	8,773,545	8,852,632	10,141,230	11,345,751	17,221,198
Naval Service	2,171,423	2,222,003	2,380,018	4,763,294	4,371,980
Air Service	1,684,562	2,258,142	3,777,320	5,821,824	10,018,104
General Services	847,332	847,017	878,506	992,224	1,149,025
National Revenue (including Income Tax)	10,359,966	10,165,641	10,962,988	11,205,101	11,870,199
Pensions, War, military, and civil	43,436,330	43,786,375	43,337,096	43,356,180	42,823,277
Pensions and National Health	10,372,480	10,936,574	12,053,582	12,452,392	13,066,320
Post Office	30,553,768	30,252,310	31,437,719	31,906,272	33,762,269
Privy Council	49,112	46,343	45,802	45,488	47,787
Public Archives	156,842	208,719	164,953	160,362	169,953
Public Printing and Stationery	172,476	367,744	168,697	169,367	161,063
Public Works	10,827,171	9,904,494	12,945,277	14,518,757	12,382,073
Royal Canadian Mounted Police	5,315,327	5,744,326	5,929,815	5,634,760	6,022,503
Secretary of State	386,616	394,963	704,972	654,705	692,331
Soldier Settlement	810,420	746,127	761,721	805,945	801,036
Trade and Commerce—					
Mail subsidies and steamship subventions	2,220,661	2,274,255	2,426,484	2,119,915	2,029,211
Canada Grain Act	1,759,183	1,679,236	1,848,251	1,738,585	1,675,051
Other departmental expenditures	3,006,685	3,057,023	3,458,235	5,522,518	4,069,797
Transport—					
Administration and miscellaneous expenditure	–	–	–	–	417,277[2]
Air Service					2,935,256[3]
Marine	5,438,746	5,742,429	5,857,428	5,614,342	4,290,279
Canadian Broadcasting Corporation	1,024,892	1,248,923	1,500,000	878,174	–
Railways and Canals	3,315,333	4,581,444	4,250,138	4,019,131	3,911,022
Maritime Freight Rates Act	1,989,130	2,529,394	2,348,399	2,505,823	3,182,458
Railway Grade Crossing Fund	310,075	274,820	127,719	53,966	179,770
Totals, Ordinary Expenditures	**351,771,161**	**359,700,909**	**372,539,149**	**387,112,072**	**414,891,410**
Capital Expenditures—					
Canals	1,986,140	337,907	457,926	51,945	–
Railways	754,194	525,772	286,887	203,035	71,454
Public Works	3,839,751	6,243,737	5,799,341	3,236,564	4,358,698
Totals, Capital Expenditures	**6,580,085**	**7,107,416**	**6,544,154**	**3,491,544**	**4,430,152**

---

[1] It was found that the tables heretofore used in valuation understated the liability on annuity contracts. This exceptional amount is due to the adoption of tables in conformity with the mortality experience of previous years.

[2] Prior to 1937–38, general administration expenses were not segregated from other expenditures of the respective services of the Departments which were amalgamated to form the Department of Mines and Resources and the Department of Transport.

[3] Prior to 1937-38 expenditures on Civil Aviation, now the Air Service Branch of the Department of Transport, were included under expenditures for the Air Service Branch of the Department of National Defence.

3.—Details of Expenditures, fiscal years 1934-38—concluded.

Item.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Special Expenditures—					
Unemployment Relief Act, 1930	4,155	2,500	26,338	[1]	[1]
Unemployment Relief Act, 1931	563,876	52,243	26,173		
Unemployment Relief Act, 1932	6,948,192	398,928	111,071		
Unemployment Relief Act, 1933	28,382,089	2,419,952	493,416		
Unemployment Relief Act, 1934	-	49,113,684	1,151,357		
Unemployment Relief Act, 1935	-	-	48,027,323		
Public Works Construction Acts	-	8,672,549	29,580,578		
Special supplementary estimates—					
Grants-in-aid to provinces	-	-	-	28,929,774	19,492,958
Dominion's share of joint Dominion-Provincial projects	-	-	-	12,691,397	8,878,166
Transportation facilities into mining areas	-	-	-	1,221,227	1,323,657
Railway maintenance	-	-	-	2,662,084	-
Administration	-	-	-	194,306	377,980
Dominion projects as provided by Special Supplementary Estimates	-	-	-	23,553,924	13,875,769
Special drought area relief	-	-	-	8,750,990	24,585,834
1930 Wheat Crop Equalization Payments Act	-	-	6,600,000	-	-
Loss on 1930 Wheat Pool and stabilization operations, payment to Canadian Wheat Board of net liabilities assumed Dec. 2, 1935	-	-	15,856,645	-	-
Loss on 1930 Oats Pool under guarantee of bank advances to Canadian Co-operative Wheat Producers, Limited	-	-	174,383	-	-
Totals, Special Expenditures	**35,898,312**	**60,659,856**	**102,047,284**	**78,003,702**	**68,534,364**
Government-Owned Enterprises—					
Losses Charged to Consolidated Revenue Fund—					
Canadian National Railways	58,955,388	48,407,901	47,421,465	43,303,394	42,345,868
Canadian National Steamships	-	-	269,969	-	-
National Harbours Board	-	-	1,126,056	249,718	288,917
Trans-Canada Air Lines	-	-	-	-	111,005
Loans and Advances (Non-Active)—					
Canadian National Steamships	Cr. 14,064	487,167	Cr. 332,664	Cr. 1,753,779	103,839
National Harbours Board	2,109,837	1,241,733	2,455,576	2,419,193	1,983,759
Totals, Government-Owned Enterprises	**61,051,161**	**50,136,801**	**50,940,402**	**44,218,526**	**44,833,388**
Other Charges—					
Write-down of Assets Chargeable to Consolidated Fund—					
Reduction in soldier and general land settlement loans	1,766,083	468,916	487,642	627,663	749,766
Yearly established losses in seed grain and relief accounts	91,003	21,275	26,924	44,425	14,197
Cancellation of Canadian Farm Loan Board capital stock	-	-	-	20,385	10,135
Province of Manitoba treasury bills	-	-	-	-	804,897
Reduction of Immigration and Colonization Assisted Passage Loans	-	-	-	-	247
Write-down of Active Assets to Non-Active Assets—					
Province of Manitoba treasury bills	-	-	-	804,897	-
Province of Saskatchewan treasury bills	-	-	-	17,682,158	-
Soldier and general land settlement non-active account—adjustment	-	-	-	60	139,361
Bonds, interest and notes—adjustment	-	-	-	-	200
Non-Active Accounts—					
Canadian Pacific Railway advances (Relief Acts)	1,000,000	-	-	-	-
Miscellaneous	100	200	Nil	Nil	Nil
Account previously carried as active asset transferred to non-active	-	11,208	-	-	-
Totals, Other Charges	**2,857,186**	**501,599**	**514,566**	**19,179,588**	**1,718,803**
Grand Totals, Expenditures	**458,157,905**	**478,106,581**	**532,585,555**	**532,005,432**	**534,408,117**

---

[1] Relief expenditures for 1937 and 1938 were continued under the Unemployment Relief and Assistance Acts, 1936 and 1937, and other items shown immediately following.

4.—Principal Items of Dominion Expenditure, fiscal years 1868-1938 (continued on p. 882).

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30; after 1906, on Mar. 31. Figures for intermediate years not shown between 1868 and 1880 will be found at pp. 845-847 of the 1938 Year Book.

Fiscal Year.	Ordinary Expenditures.							
	Interest on Debt.	Old Age Pensions.	Pensions, War and Military.	Public Works.	National Defence.	Subsidies to Provinces.	Post Office.[1]	Total Ordinary Expenditures.[2]
	$	$	$	$	$	$	$	$
1868...	4,501,568	–	56,422	126,270	1,013,016	2,753,966	616,802	13,486,093
1870...	5,047,054	–	53,586	120,031	1,245,973	2,588,605	808,623	14,345,510
1875...	6,590,790	–	63,657	1,756,010	1,013,944	3,750,962	1,520,861	23,713,071
1880...	7,773,869	–	192,889	1,046,342	690,019	3,430,846	1,818,271	24,850,634
1881...	7,594,145	–	96,389	1,108,815	667,001	3,455,518	1,876,658	25,502,554
1882...	7,740,804	–	101,197	1,342,000	772,812	3,530,999	1,980,567	27,067,104
1883...	7,668,552	–	98,446	1,765,256	734,354	3,606,673	2,176,089	28,730,157
1884...	7,700,181	–	95,543	2,908,852	989,498	3,603,714	2,312,965	31,107,706
1885...	9,419,482	–	89,879	2,302,363	2,707,758	3,959,327	2,488,315	35,037,060
1886...	10,137,009	–	88,319	2,046,552	4,355,880	4,182,526	2,763,186	39,011,612
1887...	9,682,929	–	102,109	2,133,316	1,193,693	4,169,341	2,818,907	35,657,680
1888...	9,823,313	–	120,334	2,162,116	1,273,179	4,188,514	2,889,729	36,718,495
1889...	10,148,932	–	116,030	2,299,231	1,323,552	4,051,428	2,982,321	36,917,835
1890...	9,656,841	–	107,391	1,972,501	1,287,014	3,904,922	3,074,470	35,994,031
1891...	9,584,137	–	103,850	1,937,546	1,279,514	3,903,757	3,161,676	36,343,568
1892...	9,763,978	–	92,457	1,627,851	1,266,308	3,935,914	3,316,120	36,765,894
1893...	9,806,888	–	90,309	1,927,832	1,419,746	3,935,765	3,421,203	36,814,053
1894...	10,212,596	–	86,927	2,033,955	1,284,517	4,206,655	3,517,261	37,585,025
1895...	10,466,294	–	84,349	1,742,317	1,574,014	4,250,675	3,593,647	38,132,005
1896...	10,502,430	–	86,080	1,299,769	1,136,714	4,235,664	3,665,011	36,949,142
1897...	10,645,663	–	90,882	1,463,719	1,667,588	4,238,059	3,789,478	38,349,760
1898...	10,516,758	–	96,187	1,701,313	1,514,472	4,237,372	3,575,412	38,832,526
1899...	10,855,112	–	96,129	1,902,664	2,112,292	4,250,636	3,603,799	41,903,500
1900...	10,699,645	–	93,453	2,289,889	1,846,179	4,250,608	3,758,015	42,975,279
1901...	10,807,955	–	93,551	3,386,632	2,061,674	4,250,607	3,931,446	46,866,368
1902...	10,975,935	–	83,305	4,221,294	2,060,979	4,402,098	4,023,637	50,759,392
1903...	11,068,139	–	87,925	4,065,553	1,963,009	4,402,503	4,105,178	51,691,903
1904...	11,128,637	–	113,495	4,607,330	2,252,030	4,402,292	4,347,541	55,612,833
1905...	10,630,115	–	140,424	6,765,446	2,650,700	4,516,038	4,634,528	63,319,683
1906...	10,814,697	–	179,023	7,484,716	4,294,125	6,726,373	4,921,577	67,240,641
1907[3]..	6,712,771	–	125,832	5,520,571	3,347,038	6,745,134	3,979,557	51,542,161
1908...	10,973,597	–	187,557	8,721,327	5,498,184	9,032,775	6,005,930	76,641,452
1909...	11,604,584	–	191,533	12,300,184	5,230,297	9,117,143	6,592,386	84,064,232
1910...	13,098,160	–	216,697	7,261,218	4,686,698	9,361,388	7,215,338	79,411,747
1911...	12,535,851	–	240,586	8,621,431	8,658,668	9,092,472	7,954,223	87,774,198
1912...	12,259,397	–	245,045	10,344,487	8,814,056	10,281,045	9,172,036	98,161,441
1913...	12,605,882	–	283,188	13,468,505	10,198,135	13,211,800	10,882,804	112,059,537
1914...	12,893,505	–	311,900	19,007,513	11,730,964	11,280,469	12,822,058	127,384,473
1915...	15,736,743	–	358,558	19,343,532	10,573,423	11,451,673	15,961,191	135,523,207
1916...	21,421,585	–	671,133	12,039,252	5,083,225	11,451,673	16,009,139	130,350,727
1917...	35,802,567	–	2,814,546	8,633,096	4,880,365	11,469,148	16,300,579	148,599,343
1918...	47,845,585	–	8,155,691	7,432,901	4,311,379	11,369,148	18,046,558	178,284,313
1919...	77,431,432	–	18,282,440	6,295,060	3,482,604	11,327,236	19,273,758	232,731,283
1920...	107,527,089	–	26,004,461	9,016,246	5,033,479	11,490,860	20,774,312	303,843,930
1921...	139,551,520	–	37,420,751	10,846,875	14,020,854	11,490,860	22,696,561	361,118,145
1922...	135,247,849	–	36,153,031	10,574,364	16,412,602	12,211,924	28,121,425	347,560,691
1923...	137,892,735	–	32,985,998	9,978,440	13,448,176	12,207,313	27,794,502	332,293,732
1924...	136,237,872	–	33,411,081	11,900,847	13,757,103	12,386,136	28,305,941	324,813,190
1925...	134,789,604	–	34,888,665	12,029,578	13,172,318	12,281,391	29,873,802	318,891,901
1926...	130,691,493	–	37,203,700	13,416,045	14,113,167	12,375,128	30,499,686	320,660,479
1927...	129,675,367	–	37,902,939	11,178,054	14,909,500	12,516,740	31,007,698	319,548,173
1928...	128,902,945	131,452[4]	39,778,130	14,037,366	17,659,638	12,516,740	31,782,968	336,167,961
1929...	124,989,950	832,687	41,487,323	17,003,254	19,674,201	12,553,724	33,483,058	350,952,924
1930[5]..	121,566,213	1,537,174	40,406,565	18,134,359	21,986,537	12,496,958	35,036,629	363,237,478
1931...	121,289,844	5,658,143	45,965,723	23,763,284	23,736,447	17,435,736	36,292,604	386,584,863
1932...	121,151,106	10,032,410	48,686,389	16,099,739	18,221,632	13,694,970	34,448,986	372,101,318
1933...	134,999,069	11,512,543	45,078,919	11,778,684	13,750,314	13,677,384	30,142,827	354,643,201
1934...	139,725,417	12,313,595	43,883,132	9,666,753	13,476,862	13,727,565	29,202,730	351,771,161
1935...	138,533,202	14,942,459	44,235,808	8,726,385	14,185,772	13,768,953	28,974,317	359,700,909
1936...	134,549,169	16,764,484	43,337,096	11,718,877	17,177,074	13,768,953	29,479,574	372,539,149
1937...	137,410,345	21,149,352	43,356,180	13,346,345	22,923,093	13,735,196	30,538,575	387,112,072
1938...	132,117,422	28,653,005	43,823,277	11,135,878	32,760,307	13,735,336	31,547,727	414,891,410

---

[1] The expenditures shown do not include moneys spent for Civil Government account and miscellaneous expenditures and to this extent do not correspond with the Post Office figures shown in Table 3. [2] Includes various non-enumerated items. [3] Nine months. [4] Year in which Old Age Pensions came into force. [5] Figures for 1930 and following years conform with new set-up of Public Accounts as established in 1936 (see page 877).

4.—Principal Items of Dominion Expenditure, fiscal years 1868-1938—concluded.

Fiscal Year.	Capital Expenditures.				Other Expenditures.				Total Expenditures.
	Public Works.	Railways.	Canals.	Total.[1]	Railway Subsidies.	War and Demobilization.	Other Charges.	Total.	
	$	$	$	$	$	$	$	$	$
1868.	41,690	455,250	51,498	548,438	–	–	37,158	37,158	14,071,689
1870.	1,821,887	1,693,229	Nil	3,515,116	–	–	155,988	155,988	18,016,614
1875.	189,484	5,018,428	1,714,830	6,922,742	–	–	2,253,097	2,253,097	32,888,911
1880.	8,730	6,109,078	2,123,366	8,241,174	–	–	949,948	949,948	34,041,756
1881.	187,370	5,577,237	2,077,028	8,176,317	–	–	117,772	117,772	33,796,643
1882.	70,950	5,175,047	1,647,759	7,405,637	–	–	201,805	201,805	34,674,625
1883.	119,869	11,707,619	1,763,002	14,147,360	–	–	21,369	21,369	42,898,886
1884.	491,376	14,013,075	1,577,295	23,977,702	208,000[2]	–	2,567,453	2,775,453	57,860,862
1885.	182,306	11,224,245	1,504,621	13,220,185	403,245	–	502,587	905,832	49,163,078
1886.	569,202	4,443,220	1,333,325	9,589,734	2,701,249	–	10,534,973	13,236,222	61,837,569
1887.	353,044	1,846,887	1,783,698	4,439,939	1,406,533	–	–	1,406,533	41,504,152
1888.	1,033,118	1,765,586	963,778	7,162,964	1,027,042	–	155,623	1,182,665	45,064,124
1889.	575,408	2,709,854	972,918	4,420,314	846,722	–	1,333,328	2,180,050	43,518,198
1890.	495,421	2,392,768	1,026,364	6,778,663[3]	1,678,196	–	44,947	1,723,143	41,770,333
1891.	515,702	1,184,317	1,318,092	3,115,860	1,265,706	–	68,074	1,333,780	40,793,208
1892.	224,390	417,426	1,437,149	2,164,457	1,248,216	–	2,093,569	3,341,785	42,272,136
1893.	181,878	712,918	2,069,573	3,088,318	811,394	–	139,963	951,357	40,853,728
1894.	102,059	585,749	3,027,164	3,862,970	1,229,885	–	330,354	1,560,239	43,008,234
1895.	102,393	376,815	2,452,273	3,030,490	1,310,549	–	399,294	1,709,843	42,872,338
1896.	114,826	326,065	2,258,779	3,781,311	3,228,745	–	137,185	3,365,930	44,096,384
1897.	129,238	204,624	2,348,637	3,523,160	416,955	–	682,881	1,099,836	42,972,756
1898.	364,018	270,991	3,207,249	4,143,503	1,414,935	–	943,317	2,358,252	45,334,281
1899.	385,094	1,112,348	3,899,877	5,936,343	3,201,220	–	501,572	3,702,792	51,542,635
1900.	1,089,827	3,309,130	2,639,565	7,468,843	725,720	–	1,547,624	2,273,344	52,717,467
1901.	1,006,983	3,922,989	2,360,570	7,695,488	2,512,329	–	908,681	3,421,010	57,982,866
1902.	2,190,125	5,103,288	2,114,690	10,078,638	2,093,939	–	1,038,831	3,132,770	63,970,800
1903.	1,268,005	3,083,681	1,823,273	7,052,725	1,463,222	–	1,538,722	3,001,944	61,746,572
1904.	1,334,396	2,617,770	1,880,787	7,881,719	2,046,878	–	6,713,618	8,760,496	72,255,048
1905.	1,642,042	6,125,482	2,071,594	11,933,492	1,275,630	–	2,275,334	3,550,964	78,804,139
1906.	2,359,529	6,102,566	1,552,121	11,913,871	1,637,574	–	2,485,555	4,123,129	83,277,642
1907[4]	1,797,872	7,141,569	887,838	11,329,144	1,324,889	–	1,581,944	2,906,833	65,778,139
1908.	2,969,049	23,671,553	1,723,156	30,429,907	2,037,629	–	3,469,692	5,507,321	112,578,680
1909.	2,832,295	35,846,185	1,873,868	42,593,167	1,785,887	–	4,998,238	6,784,125	133,441,524
1910.	4,514,606	21,505,913	1,650,706	29,756,353	2,048,097	–	4,179,576	6,227,673	115,395,774
1911.	3,742,717	24,760,771	2,349,475	30,852,963	1,284,892	–	2,949,197	4,234,089	122,861,250
1912.	4,116,385	24,262,253	2,560,938	30,939,576	859,400	–	7,181,665	8,041,065	137,142,082
1913.	6,057,515	18,888,889	2,259,642	27,206,046	4,935,507	–	255,787	5,191,294	144,456,878
1914.	10,100,017	24,250,498	2,829,661	37,180,176	19,036,237	–	2,640,162	21,676,399	186,241,048
1915.	11,049,030	24,907,494	5,490,796	41,447,320	5,191,507	60,750,476[2]	5,186,016	71,127,999	248,098,526
1916.	8,471,229	23,924,769	6,170,953	38,566,951	1,400,171	166,197,755	3,186,898	170,784,824	339,702,502
1917.	7,838,116	14,737,327	4,304,589	26,880,032	959,584	306,488,815	15,275,345	322,723,744	498,203,118
1918.	6,347,201	34,982,746	1,781,957	43,111,904	720,405	343,836,802	10,706,787	355,263,994	576,660,210
1919.	5,705,348	17,113,954	2,211,964	25,031,266	43,805	446,519,440	−7,283,582	439,279,663	697,042,212
1920.	38,869,683	25,881,433	4,550,762	69,301,878	334,845	346,612,955	19,995,313	366,943,113	786,031,611[5]
1921.	27,559,809	7,002,993	5,450,005	40,012,807	Nil	16,997,544	492,048	17,489,592	528,302,513[5]
1922.	10,431,698	1,381,024	4,482,610	16,295,332	"	1,544,250	301,518	1,845,768	463,528,389[5]
1923.	3,411,510	1,400,430	4,995,184	9,807,124	"	4,464,760	4,042,931	8,507,691	434,735,277[5]
1924.	3,804,427	309,455	6,747,395	10,861,277	−1,523	446,083	7,902,759	8,347,319	370,589,247[5]
1925.	6,030,320	−99,712	10,619,903	16,550,511	Nil	506,931	3,953,433	4,460,364	351,169,803[5]
1926.	4,805,949	−31,856	12,024,456	16,798,549	"	191,392	6,330,092	6,521,484	355,186,423[5]
1927.	2,920,670	2,792,344	13,845,689	19,558,703	"	64,485	7,814,977	7,879,462	358,555,751[5]
1928.	3,281,097	3,591,646	13,762,905	20,635,648	"	1,656,011	1,705,311	3,361,322	378,658,440[5]
1929.	3,342,714	6,301,979	13,164,582	22,809,275	"	−669,399	2,067,153	1,397,754	388,805,953[5]
1930[6]	8,589,022	6,873,511	10,264,187	25,726,720	"	Nil	16,302,185[7]	16,302,185	405,266,383
1931.	12,145,264	6,702,854	9,862,574	28,710,692	"	"	26,272,857[7]	26,272,857	441,568,413
1932.	7,485,438	6,376,207	3,304,298	17,165,943	"	"	59,475,056[7]	59,475,056	448,742,316
1933.	4,233,789	1,658,812	3,156,328	9,048,929	"	"	168,677,810[7]	168,677,810	532,369,940
1934.	3,839,751	754,194	1,986,140	6,580,085	"	"	99,806,659[7]	99,806,659	458,157,905
1935.	6,243,737	525,772	337,907	7,107,416	"	"	111,298,256[7]	111,298,256	478,106,581
1936.	5,799,341	286,887	457,926	6,544,154	"	"	153,502,252[7]	153,502,252	532,585,555
1937.	3,236,564	203,035	51,945	3,491,544	"	"	141,401,816[7]	141,401,816	532,005,432
1938.	4,358,698	71,454	–	4,430,152	"	"	115,086,555[7]	115,086,555	534,408,118

---

[1] Includes expenditures on militia, Dominion lands, and debt allowances to provinces; details of expenditure under these headings, under Public Works, and Railways and Canals, are shown on pp. 846-847, 1938 Year Book.

[2] First year expenditure recorded under this head.

[3] Includes $2,725,504 for the improvement of the St. Lawrence, spent during the previous years by Montreal Harbour Commission.

[4] Nine months.

[5] Includes certain advances non-active to railways, amounting to $45,780,690 in 1920, $109,662,655 in 1921, $97,950,645 in 1922, $77,863,938 in 1923, $23,710,617 in 1924, $9,934,453 in 1925, $10,000,000 in 1926, $10,000,000 in 1927; together with advances of $5,979,856 in 1923, $1,500,000 in 1924, $900,000 in 1925, $668,000 in 1926, $426,817 in 1927, $999,837 in 1928 and $758,000 in 1929, to the Canadian Merchant Marine, etc.

[6] Figures for 1930 and following years conform with new set-up of Public Accounts as explained on p. 877.

[7] For details, see Table 5, p. 883.

5.—Analysis of "Other Expenditures" (shown in Table 4), 1930-38.

Fiscal Year.	Special Expenditure.		Government-Owned Enterprises.		Other Charges.		Total.
	Unemployment Relief Acts and Public Works Construction Acts.	Wheat Bonus and Losses on Grain Marketing Operations, etc.	Losses Charged to Consolidated Fund.	Loans and Advances Non-Active.	Write-Down of Assets Chargeable to Consolidated Fund.	Non-Active Accounts.	
	$	$	$	$	$	$	$
1930	Nil	Nil	4,308,357	8,244,950	3,731,536	17,342	16,302,185
1931	4,431,655	"	6,712,239	5,487,941	9,640.997	25	26,272,857
1932	38,295,515	10,908,429	6,631,856	3,112,285	526,971	Nil	59,475,056
1933	36,720,935	1,811,472	62,139,413	66,453,050[1]	105,717	1,447,223	168,677,810
1934	35,898,311	Nil	58,955,388	2,095,773	1,857,087	1,000,100	99,806,659
1935	60,659,856	"	48,407,901	1,728,900	490,191	11,408	111,298,256
1936	79,416,256	22,631,029	48,817,489	2,122,912	514,566	Nil	153,502,252
1937	78,003,702[2]	Nil	43,553,112	665,414	692,473	18,487,115	141,401,816
1938	68,534,364[2]	"	42,745,791	2,087,597	1,579,242	139,561	115,086,555

[1] Includes a write-down of assets amounting to $62,938,239. [2] Relief projects, grants-in-aid to provinces, and other works voted as Special Supplementary Estimates, and western drought area relief authorized by Governor General's warrants.

6.—Principal Items of Receipts (Ordinary) and Total Receipts, fiscal years 1868-1938.

NOTE.—From 1868 to 1906, inclusive, the fiscal years ended on June 30; after 1906 on Mar. 31. Figures for intermediate years not shown between 1868 and 1880 will be found at p. 848 of the 1938 Year Book.

Fiscal Year.	Customs Duties.	Excise Duties.	War Tax Revenue.[1]	Total Revenue from Taxation.	Interest on Investments.	Post Office and Money Orders.	Total Revenue Receipts.[2]
	$	$	$	$	$	$	$
1868	8,578,380	3,002,588	–	11,700,681	174,073	525,692	13,687,928
1870	9,334,213	3,619,623	–	13,087,882	383,956	573,566	15,539,657
1875	15,351,012	5,069,687	–	20,664,879	840,887	1,155,332	24,649,724
1880	14,071,343	4,232,428	–	18,479,577	834,793	1,252,498	23,364,547
1881	18,406,092	5,343,022	–	23,942,139	751,513	1,352,110	29,635,298
1882	21,581,570	5,884,860	–	27,549,047	914,009	1,587,888	35,182,549
1883	23,009,582	6,260,117	–	29,269,699	1,001,193	1,800,391	36,803,669
1884	20,023,890	5,459,309	–	25,483,199	986,698	1,755,674	32,815,226
1885	18,935,428	6,449,101	–	25,384,529	1,997,035	1,841,372	33,354,041
1886	19.362,308	5,852,905	–	25,215,213	2,299,079	1,901,690	33,479,883
1887	22,373,951	6,308,201	–	28,682,152	990,887	2,020,624	35,775,531
1888	22,091,682	6,071,487	–	28,163,169	932,025	2,379,242	35,908,464
1889	23,699,413	6,886,739	–	30,586,152	1,305,392	2,220,504	38,782,870
1890	23,913,546	7,618,118	–	31,531,664	1,082,271	2,357,389	39,879,925
1891	23,305,218	6,914,850	–	30,220,068	1,077,228	2,515,823	38,579,311
1892	20,361,382	7,945,098	–	28,306,480	1,086,420	2,652,746	36,921,872
1893	20,910,662	8,367,364	–	29,278,026	1,150,167	2,773,508	38,208,609
1894	19,119,030	8,381,089	–	27,500,119	1,217,809	2,809,341	36,374,883
1895	17,585,741	7,805,733	–	25,391,474	1,336,047	2,792,790	33,978,129
1896	19,766,741	7,926,006	–	27,692,747	1,370,001	2,964,014	36,618,591
1897	19,386,278	9,170,379	–	28,556,657	1,443,004	3,202,938	37,829,778
1898	21,622,789	7,871,563	–	29,494,352	1,513,455	3,527,810	40,556,510
1899	25,150,745	9,641,227	–	34,791,972	1,590,448	3,193,778	46,743,103
1900	28,219,458	9,868,075	–	38,087,533	1,683,051	3,205,535	51,031,467
1901	28,293,930	10,318,266	–	38,612,196	1,784,834	3,441,505	52,516,333
1902	31,916,394	11,197,134	–	43.113,528	1,892,224	3,918,416	58,052,333
1903	36,738,033	12,013,779	–	48,751,812	2,020,953	4,397,833	69,348,084
1904	40,461,591	12,958,708	–	53,420,299	2,236,256	4,652,325	70,679,251
1905	41,437,569	12,586,475	–	54,020,124	2,105,031	5,125,373	71,186,072
1906	46,053,377	14,010,220	–	60,063,597	2,140,312	5,933,343	80,141,394
1907[3]	39,717,079	11,805,413	–	51,522,492	1,235,746	5,061,728	67,972,110
1908	57,200,276	15,782,152	–	72,982,428	1,925,569	7,107,887	96,055,417
1909	47,088,444	14,937,768	–	62,026,212	2,256,643	7,401,624	85,549,580
1910	59,767,681	15,253,353	–	75,021,034	2,807,465	7,958,548	101,616,476
1911	71,838,089	16,869,837	–	88,707,926	1,668,773	9,146,952	117,884,328
1912	85,051,872	19,261,662	–	104,313,534	1,281,317	10,492,394	136,108,217
1913	111,764,699	21,447,445	–	133,212,144	1,430,511	12,051,729	168,690,427
1914	104,691,238	21,452,037	–	126,143,275	1,964,541	12,954,530	163,174,395
1915	75,941,220	21,479,731	98,057[4]	97,519,008	2,980,247	13,046,665	133,073,482
1916	98,649,409	22,428,492	3,620,782	124,666,969	3,358,210	18,858,690	172,149,394
1917	134,043,842	24,412,348	16,302,238	174,758,428	3,094,012	20,902,384	232,701,294
1918	144,172,630	27,168,445	25,379,901	196,720,976	4,466,724	21,345,394	260,778,953

For footnotes, see end of table, p. 884.

6.—Principal Items of Receipts (Ordinary) and Total Receipts, fiscal years 1868-1938 —concluded.

Fiscal Year.	Customs Duties.	Excise Duties.	War Tax Revenue.[1]	Total Revenue from Taxation.	Interest on Investments.	Post Office and Money Orders.	Total Revenue Receipts.[2]
	$	$	$	$	$	$	$
1919	147,169,188	30,342,034	56,177,508	233,688,730	7,421,002	21,603,542	312,946,747
1920	168,796,823	42,698,083	82,079,801	293,574,707	17,086,981	24,471,709	349,746,335
1921	163,266,804	37,118,367	168,385,327	368,770,498	24,815,246	26,706,198	436,292,184
1922	105,686,645	36,755,207	177,484,161	319,926,013	21,961,513	26,402,299	382,271,571
1923	118,056,469	35,761,997	181,634,875	335,453,341	16,465,303	29,016,771	403,094,210
1924	121,500,799	38,181,747	182,036,261	341,718,807	11,916,479	28,865,374	406,581,318
1925	108,146,871	38,603,489	147,164,158	293,914,518	11,332,328	28,782,535	351,515,392
1926	127,355,144	42,923,549	157,296,320	327,575,013	8,535,086	30,334,575	382,893,009
1927	141,968,678	48,513,160	156,167,434	346,649,272	8,559,401	29,069,169	400,452,480
1928	156,985,818	57,400,898	150,319,087	364,705,803	10,937,822	31,562,580	429,642,577
1929	187,206,332	63,684,954	145,029,742	395,921,028	12,227,562	30,611,964	460,151,481
1930[5]	179,429,920	65,035,701	134,086,005	378,551,626	13,518,205	33,345,385	453,007,129
1931	131,208,955	57,746,808	107,320,633	296,276,396	10,421,224	30,212,326	357,720,435
1932	104,132,677	48,654,862	122,266,064	275,053,603	9,330,125	32,234,946	334,508,081
1933	70,072,932	37,833,858	146,412,011	254,318,801	11,220,989	30,928,317	311,735,286
1934	66,305,356	35,494,220	170,051,973	271,851,549	11,148,231	30,893,157	324,660,590
1935	76,561,975	43,189,655	181,118,715	304,443,729	10,963,478	31,248.324	361,973,764
1936	74,004,560	44,409,797	197,484,627	317,311,809	10,614,125	32,507,889	372,595,996
1937	83,771,091	45,956,857	256,822,921	386,550,869	11,231,035	34,274,552	454,153,747
1938	93,455,750	52,037,333	303,157,978	448,651,061	13,120,523	35,546,161	516,692,749

---

[1] For detailed statement, see Table 9, p. 886. [2] Includes various smaller items of revenue receipts for most earlier years and special receipts since 1921. [3] Nine months. [4] Year tax imposed. [5] Figures for 1930 and following years conform with new set-up of Public Accounts as established in 1936 (see p. 877).

7.—Per Capita Figures of Taxation, Total Revenue Receipts, Expenditure on Consolidated Fund Account, and Total Expenditures, 1868-1938.

NOTE.—The years marked with an asterisk (*) are those of the censuses, Apr. 6, 1891; Apr. 1, 1901; June 1, 1911, 1921, and 1931. For the intercensal years the populations are estimated as at June 1 (see p. 113). See the tables on pp. 871-884 for the figures of revenue and expenditure on which this table is based. Figures for intermediate years not shown between 1868 and 1885 will be found at p. 849 of the 1938 Year Book.

Fiscal Year.	Per Capita.				Fiscal Year.	Per Capita.			
	Revenue from Taxation.	Total Revenue Receipts.	Expenditure on Consolidated Fund Acct.	Total Disbursements.		Revenue from Taxation.	Total Revenue Receipts.	Expenditure on Consolidated Fund Acct.	Total Disbursements.
	$	$	$	$		$	$	$	$
1868	3·33	3·90	3·84	4·01	1910	10·74	14·54	11·36	16·51
1870	3·61	4·29	3·96	4·97	1911*	12·31	16·36	12·18	17·04
1875	5·23	6·23	6·00	8·32	1912	14·12	18·42	13·28	18·56
1880	4·34	5·49	5·84	8·00	1913	17·45	22·10	14·68	18·93
1885	5·60	7·37	7·72	10·84	1914	16·01	20·71	16·17	23·64
1886	5·56	7·31	8·60	13·63	1915	12·22	16·67	16·98	31·09
1887	6·20	7·73	7·71	8·97	1916	15·58	21·52	16·29	42·46
1888	6·02	7·68	7·85	9·63	1917	21·68	28·87	18·44	61·81
1889	6·47	8·20	7·81	9·20	1918	24·14	32·01	21·88	70·77
1890	6·60	8·34	7·53	8·74	1919	28·12	37·65	28·00	83·87
1891*	6·25	7·98	7·52	8·44	1920	34·31	40·88	35·51	91·87
1892	5·80	7·56	7·53	8·66	1921*	41·96	49·65	41·09	60·11
1893	5·94	7·75	7·47	8·29	1922	35·87	42·86	38·97	51·97
1894	5·52	7·31	7·55	8·64	1923	37·24	44·74	36·88	48·26
1895	5·05	6·76	7·59	8·53	1924	37·38	44·47	35·53	40·53
1896	5·46	7·22	7·52	8·69	1925	31·63	37·82	34·32	37·78
1897	5·58	7·39	7·49	8·40	1926	34·66	40·51	33·93	37·59
1898	5·70	7·84	7·50	8·76	1927	35·98	41·56	33·17	37·21
1899	6·65	8·93	8·00	9·85	1928	37·09	43·69	34·19	38·51
1900	7·18	9·63	8·11	9·94	1929	39·49	45·88	35·00	38·78
1901*	7·19	9·78	8·72	10·79	1930	37·09	43·68	35·06	39·01
1902	7·85	10·57	9·24	11·64	1931*	28·55	34·32	37·55	42·41
1903	8·63	12·27	9·15	10·93	1932	26·18	32·05	35·73	42·92
1904	9·17	12·13	9·54	12·40	1933	23·81	29·13	33·57	49·79
1905	9·00	11·86	10·72	13·13	1934	25·12	29·98	32·03	42·31
1906	9·69	12·93	10·85	13·44	1935	27·84	33·09	32·41	43·71
1907[1]	8·31	10·60	8·32	10·61	1936	28·77	33·79	33·78	48·29
1908	11·02	14·50	11·57	16·99	1937	34·76	40·84	34·81	47·84
1909	9·12	12·58	12·36	19·62	1938	40·03	46·10	37·01	47·68

---

[1] Nine months.

8.—Per Capita Revenue Receipts and Expenditures, by Principal Items, 1934-38.

NOTE.—See Table 2 on pp. 877–878 for the revenue receipts and Table 3 on pp. 878–880 for expenditures on which these per capita figures are based. Dashes in this table indicate that no revenue was collected or expenditures made under the corresponding heads because the items were not applicable in the years so indicated.

Item.	1934.	1935.	1936.	1937.	1938.
	REVENUE RECEIPTS.				
Consolidated Fund Receipts—	$	$	$	$	$
Taxation—					
Customs	6·13	7·00	6·71	7·53	8·34
Excise duties	3·28	3·95	4·02	4·13	4·64
War Tax Revenue—					
Banks	0·12	0·13	0·11	0·11	0·10
Insurance companies	0·07	0·07	0·07	0·07	0·08
Income tax	5·67	6·11	7·49	9·21	10·74
Sales tax	5·67	6·63	7·03	10·15	12·32
Tax on cheques, transportation tax, etc	4·17	3·64	3·19	3·56	3·82
Tax on gold	–	0·33	0·13	–	–
Totals, Receipts from Taxation	25·11	27·86	28·75	34·76	40·03
Non-Tax Revenue—					
Canada Grain Act	0·11	0·11	0·11	0·11	0·06
Canals	0·08	0·08	0·08	0·09	0·17
Dominion lands	0·04	0·05	0·04	0·04	0·05
Interest on investments	1·03	1·27	0·96	1·01	1·17
Patent and copyright fees	0·04	0·04	0·04	0·04	0·04
Post Office	2·85	2·86	2·94	3·08	3·19
Totals, Non-Tax Revenue[1]	4·82	4·94	4·98	5·26	5·50
Totals, Consolidated Fund Receipts	**29·94**	**32·78**	**33·75**	**40·02**	**45·53**
Special receipts and other credits	0·05	0·32	0·03	0·82	0·57
Grand Totals, Receipts	**29·99**	**33·10**	**33·78**	**40·84**	**46·10**
	EXPENDITURES.				
Ordinary Expenditures—					
Agriculture	0·65	0·65	0·85	0·79	0·80
Finance—					
Interest on public debt	12·91	12·67	12·20	12·36	11·79
Subsidies to provinces	1·27	1·26	1·25	1·24	1·23
Old age pensions	1·14	1·37	1·52	1·90	2·56
Fisheries	0·15	0·15	0·15	0·15	0·17
Justice (including penitentiaries)	0·47	0·46	0·44	0·44	0·45
Labour (including technical education and Government annuities)	0·08	0·07	0·09	0·12	0·87[2]
Mines and Resources—					
Immigration and Colonization	0·13	0·12	0·12	0·12	0·10
Indian Affairs	0·40	0·40	0·44	0·44	0·44
Interior	0·26	0·25	0·27	0·26	0·22
Mines and Geological Survey	0·08	0·09	0·09	0·10	0·06
Movement of Coal and Domestic Fuel Act	0·26	0·19	0·19	0·20	0·22
National Defence	1·25	1·30	1·56	2·06	2·92
National Revenue (including Income Tax)	0·96	0·93	0·99	1·01	1·06
Pensions, War, military, and civil	4·01	4·00	3·93	3·90	3·82
Pensions and National Health	0·96	1·00	1·09	1·12	1·17
Post Office	2·82	2·77	2·85	2·87	3·01
Public Works	1·00	0·91	1·17	1·31	1·10
Royal Canadian Mounted Police	0·49	0·53	0·54	0·51	0·54
Trade and Commerce	0·65	0·64	0·70	0·84	0·60
Transport—					
Marine	0·50	0·53	0·53	0·50	0·38
Canadian Broadcasting Corporation	0·09	0·11	0·14	0·08	–
Railways and Canals (including Maritime Freight Rates Act and Railway Grade Crossing Fund)	0·52	0·68	0·61	0·59	0·65
Totals, Ordinary Expenditures[1]	**32·50**	**32·89**	**33·78**	**34·81**	**37·01**
Totals, Capital Expenditures	**0·61**	**0·65**	**0·59**	**0·31**	**0·40**
Totals, Special Expenditures	**3·32**	**5·55**	**9·25**	**7·01**	**6·11**
Government-Owned Enterprises	**5·64**	**4·58**	**4·62**	**3·98**	**4·00**
Other Expenditures	**0·26**	**0·05**	**0·05**	**1·73**	**0·15**
Grand Totals, Expenditures	**42·33**	**43·72**	**48·29**	**47·84**	**47·68**

[1] Includes other items not specified.

[2] See footnote 1, Table 3, p. 879.

Subsection 3.—War Tax Revenue.

An account of the various War taxes imposed in 1915 and subsequently has already been given on p. 874 in the introduction to this Section. For convenience of reference, amounts received from these taxes since first instituted are segregated and the totals paid to the Receiver General are given in Table **9.** The taxes imposed on banks, trust and loan companies, and insurance companies are collected by the Department of Finance. The excise War taxes and the income War tax are collected by the Department of National Revenue. Receipts from the income tax are analyzed in Tables **10** to **14.** The amounts of excise War taxes collected from different sources in the past six fiscal years are given in Table **16,** while Table **17** contains the details by provinces for the latest year.

9.—War Tax Revenues Received by the Receiver General, fiscal years 1915, 1919, 1920, and 1925-38.

NOTE.—Statistics for the intervening years from 1916 to 1924 will be found at p. 851 of the 1938 Year Book. Receipts for these years are included in the totals.

Fiscal Year.	Banks.[1]	Trust and Loan Companies.[1]	Insurance Companies.[1]	Business Profits.[2]	Income Tax.	Sales and Other Excise Taxes.	Total War Tax Revenue.
	$	$	$	$	$	$	$
1915	Nil	Nil	Nil	Nil	Nil	98,057	98,057
1919	1,099,764	323,340	546,114	32,970,002	9,349,720	11,888,508	56,177,508
1920	1,170,223	274,216	638,731	44,145,184	20,263,740	15,587,707	82,079,801
1925	1,217,754	315,315	867,902	2,704,427	56,248,043	85,810,717	147,164,158
1926	1,176,869	326,714	950,221	1,173,449	55,571,962	98,097,106	157,296,321
1927	1,174,665	335,368	947,830	710,102	47,386,309	105,613,160	156,167,434
1928	1,224,645	345,430	999,003	956,031	56,571,047	90,222,931	150,319,087
1929	1,242,399	7,641	894,864	455,232	59,422,323	83,007,283	145,029,742
1930	1,408,420	Nil	74,416	173,300	69,020,726	63,409,143	134,086,005
1931	1,429,264	6	74,250	34,430	71,048,022	34,734,661	107,320,633
1932	1,390,121	Nil	12,152	3,000	61,254,400	59,606,391	122,266,064
1933	1,327,535	"	826,150	54	62,066,697	82,191,575	146,412,011
1934	1,335,546	"	741,681	Nil	61,399,171	106,575,575	170,051,973
1935	1,368,480	"	750,100	"	66,808,066	112,192,069	181,118,715
1936	1,280,933	"	760,843	"	82,709,803	112,733,048	197,484,627
1937	1,209,894	"	774,363	"	102,365,242	152,473,422	256,822,921
1938	1,106,859	"	866,820	"	120,365,531	180,818,767	303,157,977
Totals, 1915-38.	**28,726,224**	**3,922,644**	**15,368,467**	**198,544,083**	**1,240,832,547**	**1,780,502,614**	**3,267,896,579**

[1] The figures are for special taxation only, imposed in 1915 as outlined on p. 874. "Insurance Companies" are exclusive of life and marine insurance companies. [2] Although this tax was not charged upon profits accruing after Dec. 31, 1920 (see 14-15 Geo. V, c. 10), belated revenue therefrom continued to be received until 1933.

Income Tax.—One of the chief sources of revenue of the Dominion Government is the income tax which, with the sales tax, now provides much the larger part of what is still known as War tax revenue. The latter tax was inaugurated in 1915 but the income tax was not resorted to as a source of revenue until 1919 and, whereas during the first year of its operations $9,350,000 was collected, the Dominion coffers were enriched to the extent of $120,000,000 in 1938.

Tables **10** to **14** analyse the receipts from income tax from different angles: by provinces; by individuals and corporations; by size of income class; and by occupations of taxpayer.

10.—Income Assessed for the Purposes of the Income War Tax, by Provinces, fiscal years 1934-38.

Province.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Prince Edward Island	2,072,019	2,256,109	4,579,652	4,446,650	10,687,177
Nova Scotia	19,701,482	21,405,900	21,794,087	23,969,857	27,108,595
New Brunswick	16,551,288	14,207,882	14,389,098	16,539,884	18,348,481
Quebec	179,807,900	273,987,869	357,486,710	331,710,154	282,712,958
Ontario	428,279,628	449,885,677	501,917,767	517,310,542	522,198,138
Manitoba	45,049,397	47,188,764	46,760,597	48,430,521	43,128,266
Saskatchewan	19,056,999	15,226,696	15,347,973	16,918,431	20,191,316
Alberta	43,652,512	35,653,360	35,171,837	36,833,766	34,693,719
British Columbia	73,972,698	67,822,116	74,959,621	83,771,834	106,123,159
Yukon	1,187,641	920,657	1,034,774	958,431	842,735
Totals	**829,331,564**	**928,555,030**	**1,073,442,116**	**1,080,890,070**	**1,066,034,544**

11.—Amounts of Income Tax Collected, by Provinces, fiscal years 1934-38.

Note.—Includes the 5 p.c. tax on interest and dividends imposed in 1933. (See pp. 889-890.)

Province.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Prince Edward Island	128,932	329,667	426,893	872,985	970,278
Nova Scotia	910,801	957,893	1,206,481	1,375,274	1,614,332
New Brunswick	658,192	570,492	811,186	910,940	1,100,728
Quebec	20,153,390	20,483,134	25,205,466	29,301,603	34,111,907
Ontario	31,546,913	35,935,202	45,059,358	58,162,075	68,170,189
Manitoba	1,921,908	1,922,323	2,204,596	2,484,464	3,008,384
Saskatchewan	371,283	296,896	327,843	409,395	537,521
Alberta	1,390,425	1,298,740	1,599,511	1,850,705	1,922,628
British Columbia	3,872,376	4,526,254	5,512,408	6,738,986	8,819,374
Yukon	26,504	16,673	17,850	23,519	26,675
Head Office	418,448	470,792	338,211	235,296	83,515
Totals	**61,399,172**	**66,808,066**	**82,709,803**	**102,365,242**	**120,365,531**

12.—Income Assessed for the Purposes of the Income War Tax, by Individuals and Corporations, fiscal years 1921-38.

Fiscal Year.	Individuals.		Corporations.		Total Income Assessment.
	No.	Assessment.	No.	Assessment.	
		$		$	$
1921	190,561	[1]	3,696	[1]	912,410,429
1922	290,584	1,058,577,617	8,286	403,951,553	1,462,529,170
1923	281,182	823,100,878	6,010	269,307,047	1,092,407,925
1924	239,036	802,617,497	5,569	305,410,374	1,108,027,871
1925	225,514	701,892,820	6,236	297,267,428	999,160,248
1926	209,539	697,016,973	5,738	306,093,673	1,003,110,646
1927[2]	116,029	465,689,900	5,777	278,494,991	744,184,891
1928	122,026	604,736,116	6,121	435,496,832	1,040,232,948
1929	129,663	668,687,536	7,438	526,714,731	1,195,402,267
1930	142,154	781,174,030	7,957	544,019,414	1,325,193,444
1931	143,601	815,714,684	7,603	555,763,956	1,371,478,640
1932	133,621	660,107,257	6,010	332,498,963	992,606,220
1933[2]	166,972	685,543,980	6,483	258,547,584	944,091,564
1934[2]	203,957	617,717,251	8,913	211,614,313	829,331,564
1935	184,195	655,380,912	10,458	273,174,118	928,555,030
1936	199,102	714,333,602	10,970	359,108,514	1,073,442,116
1937	217,049	728,043,754	12,146	352,846,316	1,080,890,070
1938	237,064	712,183,316	13,949	353,851,228	1,066,034,544

[1] Not segregated into individual and corporation groups for this year.

[2] In 1927 the exemption limits, in the case of individuals, from $2,000 to $3,000 for married, and from $1,000 to $1,500 for single persons came into operation; in 1933 the limits were $2,400 and $1,200, and in 1934 the reduction to the old basis was effective. The effects are reflected in the changes in the numbers of taxpayers.

13.—Income Tax Paid (Individuals and Corporations), by Size of Income, fiscal years 1935-38.

Income Class.	1935.		1936.		1937.		1938.	
	No.	$	No.	$	No.	$	No.	$
	INDIVIDUALS.							
Under $2,000.......	85,385	950,120	89,724	987,387	98,423	1,053,965	106,764	1,152,471
$ 2,000 to $ 3,000..	41,918	938,923	46,198	1,042,133	50,618	1,092,977	56,026	1,196,682
$ 3,000 to $ 4,000..	24,127	1,023,176	26,804	1,125,428	28,690	1,194,403	30,973	1,348,557
$ 4,000 to $ 5,000..	11,672	987,367	12,766	1,049,783	13,852	1,118,943	14,727	1,216,838
$ 5,000 to $ 6,000..	6,238	900,743	6,759	976,905	7,448	1,073,633	8,016	1,174,617
$ 6,000 to $ 7,000..	3,729	808,817	4,267	948,545	4,480	1,026,244	5,148	1,180,612
$ 7,000 to $ 8,000..	2,464	761,327	2,816	878,603	2,993	944,173	3,344	1,048,250
$ 8,000 to $ 9,000..	1,777	757,751	1,898	834,797	2,078	892,847	2,290	985,368
$ 9,000 to $10,000..	1,229	667,977	1,422	767,668	1,533	823,620	1,691	919,723
$10,000 to $15,000..	2,815	2,402,676	3,303	3,033,935	3,520	3,194,978	4,121	3,753,354
$15,000 to $20,000..	1,198	1,982,488	1,290	2,357,644	1,431	2,674,299	1,613	2,919,947
$20,000 to $25,000..	558	1,645,480	654	2,029,986	724	2,271,437	763	2,351,043
$25,000 to $30,000..	329	1,263,474	345	1,548,875	380	1,753,135	452	2,087,838
$30,000 to $35,000..	211	1,124,562	236	1,485,413	261	1,701,135	314	1,923,770
$35,000 to $40,000..	132	911,269	137	1,071,460	133	1,061,177	215	1,622,398
$40,000 to $45,000..	70	651,415	101	996,645	108	1,085,591	134	1,245,898
$45,000 to $50,000..	84	837,922	78	866,677	77	902,373	91	1,095,111
$50,000 or over.....	259	6,458,127	304	11,055,666	300	11,636,031	382	14,027,159
Totals.........	**184,195**	**25,073,614**	**199,102**	**33,057,550**	**217,049**	**35,500,961**	**237,064**	**41,249,636**
Unclassified amounts.........	–	450,950	–	309,337	–	232,669	–	80,435
	184,195	25,524,564	199,102	33,366,887	217,049	35,733,630	237,064	41,330,071
Refunds...........	–	323,172	–	383,655	–	291,245	–	885,232
Net Totals....	**184,195**	**25,201,392**	**199,102**	**32,983,232**	**217,049**	**35,442,385**	**237,064**	**40,444,839**
	CORPORATIONS.							
Under $2,000......	6,167	479,820	6,306	547,271	6,671	659,781	7,669	735,456
$ 2,000 to $ 3,000..	885	280,660	776	309,947	950	381,317	960	400,804
$ 3,000 to $ 4,000..	482	249,672	479	259,761	558	328,084	579	347,869
$ 4,000 to $ 5,000..	314	226,180	384	271,588	403	303,870	439	345,894
$ 5,000 to $ 6,000..	251	201,651	289	238,891	298	284,199	325	305,709
$ 6,000 to $ 7,000..	177	175,257	193	199,553	244	258,323	270	317,401
$ 7,000 to $ 8,000..	169	170,205	179	196,966	191	237,978	252	317,100
$ 8,000 to $ 9,000..	129	170,536	155	214,176	155	213,394	163	251,106
$ 9,000 to $10,000..	113	160,873	114	165.293	155	241,772	195	298,756
$10,000 to $15,000..	366	677,923	407	774,018	522	1,060,377	552	1,200,875
$15,000 to $20,000..	247	575,809	252	651,499	354	986.321	410	1,155,034
$20,000 to $25,000..	155	503,561	188	602,834	199	737,521	279	1,056,383
$25,000 to $30,000..	118	412,059	151	585,823	169	688,609	215	896,692
$30,000 to $35,000..	98	467,861	105	511,228	126	651,375	169	883,432
$35,000 to $40,000..	58	322,354	79	387,046	105	605,868	129	827,559
$40,000 to $45,000..	63	376,584	69	390,267	64	449,998	124	856,213
$45,000 to $50,000..	43	321,751	67	455,800	90	629,706	101	709,111
$50,000 or over.....	617	30,590,016	773	36,169 233	892	49,967,659	1,113	59,698,715
Totals.........	**10,458**[1]	**36,363,794**[1]	**10,970**[2]	**42,933,281**[2]	**12,146**	**58,690,403**[3]	**13,949**[4]	**70,607,523**[4]
Unclassified amounts.........	–	30,219	–	28,874	–	2,627	–	3,080
	10,458[1]	36,394,013[1]	10,970[2]	42,962,155[2]	12,146	58,693,030[3]	13,949[4]	70,610,603[4]
Refunds...........	–	603,774	–	443,184	–	680,187	–	841,998
Net Totals......	**10,458**[1]	**35,790,239**[1]	**10,970**[2]	**42,518,971**[2]	**12,146**	**58,012,843**[3]	**13,949**[4]	**69,768,605**[4]

[1] Totals include 6 corporations paying $1,022 in taxation grouped to conceal net income and identity of taxpayers. [2] Totals include 4 corporations paying $2,088 in taxation grouped to conceal net income and identity of taxpayers. [3] Totals include corporations paying $4,251 in taxation grouped to conceal net income and identity of taxpayers. [4] Totals include 5 corporations paying $3,414 in taxation grouped to conceal net income and identity of taxpayers.

14.—Income Tax Paid (Individuals and Corporations), by Occupations of the Taxpayers, fiscal years 1935-38.

NOTE.—Exclusive of special 5 p.c. tax on interest and dividends; see text at foot of this page.

Occupation.	1935.		1936.		1937.		1938.	
	No.	$	No.	$	No.	$	No.	$
				INDIVIDUALS.				
Agrarians	416	24,083	694	46,609	921	76,395	1,000	78,081
Professionals	5,800	1,609,621	6,579	1,967,035	6,992	1,903,221	7,708	2,270.077
Employees	149,418	10,930,997	159,972	12,474,844	174,349	13,506,473	189,731	15,053,910
Merchants, retail	5,104	552,256	6,417	748,782	7,400	867,710	8,782	1,100,905
Merchants, wholesale	620	201,435	832	318,988	878	317,214	1,024	384,168
Manufacturers	442	112,466	547	164,014	596	170,196	677	176,508
Natural resources	99	39,819	155	41,559	161	32,561	202	48,908
Financial	11,673	6,379,505	12,995	8,931,621	13,871	9,980,752	14,957	12,654,511
Personal corporations	584	2,351,883	538	4,433,134	541	4,502,616	570	4,661,792
Family corporations	116	154,329	14	31,247	Nil	-	Nil	-
All others	9,923	2,717,220	10,359	3,899,717	11,340	4,143,823	12,413	4,820,776
Unclassified	-	450,950	-	309,337	-	232,669	-	80,435
Totals	**184,195**	**25,524,564**	**199,102**	**33,366,887**	**217,049**	**35,733,630**	**237,064**	**41,330,071**
Refunds	-	323,172	-	383,655	-	291,245	-	885,232
Net Totals	**184,195**	**25,201,392**	**199,102**	**32,983,232**	**217,049**	**35,442,385**	**237,064**	**40,444,839**
				CORPORATIONS.				
Agrarians	92	32,344	114	56,859	132	67,696	121	71,490
Merchants, retail	1,645	1,542,673	1,854	2,103,684	2,238	2,632,761	2,577	3,434,094
Merchants, wholesale	1,086	2,057,735	1,150	2,418,014	1,308	3,029,043	1,455	3,872,960
Manufacturers	2,250	15,079.937	2,727	21,264,276	3,060	26,618,505	3,500	32,279,596
Natural resources	186	7,848,415	214	4,317,700	258	10,543,396	260	12,289,490
Financial	3,544	4,339,441	2,806	5,748,756	2,862	7,217,403	3,468	8,680,772
Transportation and public utilities	463	3,695,881	555	5,114,318	586	6,071,188	646	6,945,216
All others	1,192	1,767,368	1,550	1,909,674	1,702	2,510,410	1,922	3,033,905
Unclassified	-	30,219	-	28,874	-	2,627	-	3,080
Totals	**10,458**	**36,394,013**	**10,970**	**42,962,155**	**12,146**	**58,693,030**	**13,949**	**70,610,603**
Refunds	-	603.774	-	443,184	-	680,187	-	841,998
Net Totals	**10,458**	**35,790,239**	**10,970**	**42,518,971**	**12,146**	**58,012,843**	**13,949**	**69,768,605**
Grand Totals, Individuals and Corporations	-	**60,991,631**	-	**75,502,202**	-	**93,455,228**	-	**110,213,444**

Table **15** shows the amount received from the special 5 p.c. tax of 1933 (c. 41, 1932-33) imposed at the source on interest (if paid solely in Canadian funds) and dividends paid by Canadian debtors to non-residents of Canada, and on interest and dividends received by Canadian residents by way of bearer coupons or cheques where such are payable by Canadian debtors, optionally or otherwise, in foreign currencies, and such coupons or cheques are cashed in a currency which is at a premium over Canadian funds. The receipts are classified by provinces, no further classification being available.

15.—Amounts Received from Special Five Per Cent Tax on Interest and Dividends, fiscal years 1934-38.

Province.	1934.		1935.		1936.		1937.		1938.	
	Amount of Tax Received.	P.C. of Total.	Amount of Tax Received.	P.C. of Total.	Amount of Tax Received.	P.C. of Total.	Amount of Tax Received.	P.C. of Total.	Amount of Tax Received.	P.C. of Total.
	$		$		$		$		$	
P.E.I.	7,218	0·15	186,857	3·21	134,726	1·87	502,316	5·64	387,732	3·82
N.S.	41,627	0·86	42,047	0·72	72,733	1·01	50,084	0·56	49,845	0·48
N.B.	21,898	0·45	6,284	0·11	8,836	0·12	12,006	0·13	14,653	0·14
Que.	1,490,648	30·87	1,413,800	24·31	1,532,864	21·27	1,967,221	22·08	2,525,363	24·88
Ont.	2,933,351	60·74	3,830,920	65·86	4,903,102	68·03	5,940,309	66·66	6,697,199	65·97
Man.	69,287	1·44	52,705	0·91	65,203	0·90	56,821	0·64	63,357	0·62
Sask.	8,311	0·17	6,590	0·11	8,096	0·11	12,093	0·14	7,461	0·08
Alta.	47,036	0·97	38,546	0·67	52,622	0·73	50,206	0·57	48,968	0·49
B.C.	210,227	4·35	238,686	4·10	429,419	5·96	318,958	3·58	357,510	3·52
Yukon	32	-	Nil	-	Nil	-	Nil	-	Nil	-
Totals	**4,829,635**	**100·00**	**5,816,435**	**100·00**	**7,207,601**	**100·00**	**8,910,014**	**100·00**	**10,152,088**	**100·00**

Excise War Taxes.—In addition to the income tax, and to those War taxes collected by the Department of Finance, as outlined in the text at the head of p. 886, there are certain excise War taxes collected by the Department of National Revenue. These amounted to $184,627,479 for 1938. In Table **16** an analysis of these taxes for the years 1933-38 is given and in Table **17**, collections by provinces under each head are shown for the latest fiscal year.

16.—Summary of Excise War Taxes Collected by the Department of National Revenue, fiscal years 1933-38.

(Accrued Revenue.)

Item.	1933.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$	$
Licences	42,366	42,506	48,576	41,872	44,734	51,958
Stamps	3,276,618	4,438,833	4,419,907	4,404,764	5,543,480	4,824,752
Matches	1,659,907	1,672,390	1,457,117	1,566,896	1,496,195	1,609,604
Automobiles	220,328	855,490	1,241,918	1,261,918	1,317,561	1,258,590
Playing cards	206,020	240,488	244,000	278,090	222,500	233,000
Toilet preparations	Nil	862,119	1,051,997	1,078,376	1,112,021	1,157,111
Cigars	153,677	120,469	120,795	124,837	121,106	124,632
Wines	195,369	213,631	248,425	203,466	207,191	239,787
Ale, beer, and porter	4,972,604	4,718,307	1,773,712	Nil	Nil	Nil
Malt products	Nil	209,332	64,225	"	"	"
Sugar	"	14,122,564	10,679,488	10,037,792	10,306,171	10,549,056
Transportation and telephones	1,031,657	1,375,046	1,463,203	1,460,952	1,582,223	1,727,434
Embossed cheques (Departmental)	115,711	201,395	216,834	229,511	252,899	233,363
Lighters	Nil	Nil	Nil	18,881	26,273	23,974
Cigarette papers and tubes	"	"	"	Nil	Nil	146,152
Penalties and interest	91,073	142,328	84,588	85,672	103,764	120,637
Sales, domestic	49,275,963	54,244,032	64,011,591	70,259,941	99,421,015	121,348,801
Domestic Totals	**61,241,293**	**83,458,930**	**87,126,375**	**91,052,968**	**121,757,133**	**143,648,851**
Importations—						
Sales	8,701,609	8,979,576	10,432,314	10,918,243	16,717,786	20,514,447
Excise	34,707	1,434,656	1,510,296	1,561,268	1,889,731	1,842,732
Special excise 3 p.c.	13,377,726	14,534,620	15,007,274	12,939,182	15,415,315	18,621,449
Grand Totals, Excise Taxes	**83,355,335**[1]	**108,407,782**[1]	**114,076,259**[1]	**116,471,661**[1]	**155,779,965**[1]	**184,627,479**[1]

---

[1] Includes refunds of $1,163,759 in 1933, $1,832,208 in 1934, $2,352,789 in 1935, $3,270,014 in 1936, $3,306,541 in 1937, and $3,808,712 in 1938.

17.—Excise War Taxes Collected by the Department of National Revenue, by Provinces, fiscal year 1938.

Province or Other Source.	Licences.	Stamps.	Matches.	Lighters.	Automobiles.	Sales, Domestic.	Toilet Preparations.
	$	$	$	$	$	$	$
Prince Edward Island	98	18,839	Nil	Nil	Nil	33,194	Nil
Nova Scotia	1,086	115,599	“	“	803	1,861,982	195
New Brunswick	840	78,671	“	“	2,557	1,100,642	23
Quebec	15,700	1,423,343	948,706	76	103,958	41,550,588	294,202
Ontario	25,446	2,306,764	660,898	23,898	1,140,680	66,667,150	824,045
Manitoba	1,916	232,685	Nil	Nil	2,516	3,333,409	29,393
Saskatchewan	706	105,860	“	“	58	743,677	1,076
Alberta	1,684	206,726	“	“	1,183	1,297,654	595
British Columbia	4,472	329,113	“	“	6,835	4,757,805	7,582
Yukon	10	2,187	“	“	Nil	2,700	Nil
Departmental sales	Nil	4,965	“	“	“	Nil	“
Totals	**51,958**	**4,824,752**	**1,609,604**	**23,974**	**1,258,590**	**121,348,801**	**1,157,111**

	Playing Cards.	Cigars.	Cigarette Papers and Tubes.	Wines.	Sugar.	Embossed Cheques.	Transportation and Telephones.
	$	$	$	$	$	$	$
Prince Edward Island	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Nova Scotia	“	“	“	“	1,062,160	“	31,069
New Brunswick	“	“	“	“	1,580,597	“	24,222
Quebec	98,000	86,290	132,557	29,720	1,695,311	“	1,077,159
Ontario	135,000	37,581	13,595	187,025	4,092,887	“	403,771
Manitoba	“	“	“	18	Nil	“	34,122
Saskatchewan	“	“	“	6,900	“	“	45,023
Alberta	“	“	“	Nil	640,718	“	55,574
British Columbia	“	761	“	16,124	1,477,383	“	56,440
Yukon	“	“	“	Nil	Nil	“	54
Departmental sales	“	“	“	“	“	233,363	Nil
Totals	**233,000**	**124,632**	**146,152**	**239,787**	**10,549,056**	**233,363**	**1,727,434**

	Interest.	Domestic Total.	Importations.			Grand Total.
			Sales.	Excise.	Special Excise. 3 p.c.	
	$	$	$	$	$	$
Prince Edward Island	51	52,182	29,310	202	10,449	92,144
Nova Scotia	746	3,073,639	450,975	4,735	381,845	3,911,193
New Brunswick	2,117	2,789,668	532,926	1,771	225,628	3,549,994
Quebec	45,793	47,501,403	5,526,339	1,297,092	5,009,671	59,334,505
Ontario	55,701	76,574,442	9,144,472	432,209	10,278,040	96,429,163
Manitoba	4,881	3,638,940	1,172,704	44,884	661,635	5,518,163
Saskatchewan	1,327	904,627	271,167	3,005	255,764	1,434,562
Alberta	2,233	2,206,368	845,560	7,545	486,382	3,545,855
British Columbia	7,627	6,664,143	2,491,398	51,246	1,295,621	10,502,408
Yukon	161	5,111	47,849	43	16,414	69,417
Departmental sales	Nil	238,328	Nil	Nil	Nil	238,328
British Post Office parcels	“	Nil	1,747	“	“	1,747
Totals	**120,637**	**143,648,851**	**20,514,447**	**1,842,732**	**18,621,449**	**184,627,479**

Subsection 4.—Inland Revenue.

Under the Inland Revenue Act (R.S.C., 1906, c. 5), the Department of Inland Revenue had the control and management of standard weights and measures and of the collection of excise duties, of stamp duties, internal taxes, bridge and ferry tolls and rents until 1918. It administered the statutes which dealt with the adulteration of food and other articles, electricity and gas inspection, patent medicines, petroleum, naphtha, and the analysis of fertilizers and feeding stuffs. This Department also established the food standards which were put into force by Orders in Council under the authority of Sec. 26 of the Adulteration Act. Later the administration of the Adulteration of Food, and the Proprietary and Patent Medicine Acts was transferred to the Department of Health, that of the Commercial Feeding Stuffs, and Fertilizers Acts to the Department of Agriculture, and that of the Acts relating to weights and measures, and the inspection of gas, electric light, and water meters to the Department of Trade and Commerce. By Order in Council of May 18, 1918, the Departments of Customs and of Inland Revenue were combined as the Department of Customs and Inland Revenue, under one Minister of the Crown. On June 4, 1921, the Department of Customs and Inland Revenue was consolidated as the Department of Customs and Excise (11-12 Geo. V, c. 26). As from Apr. 1, 1927, the name of this Department, which collects the great bulk of the revenue of the Dominion, was changed to Department of National Revenue by authority of 17 Geo. V, c. 34. This Act provides for three chief departmental officers—the Commissioner of Customs, the Commissioner of Excise, and the Commissioner of Income Tax; an Assistant Commissioner of Customs may also be appointed. While the income tax is collected by the Commissioner of Income Tax, the other main branches of inland revenue—the excise duties and excise War taxes—are collected by the Commissioner of Excise.

Canadian Excise Tariff.—The following is a statement of the Canadian excise tariff, as existing at Jan. 1, 1939:—

1. Spirits distilled in Canada, per proof gal.	$ 4·00
Canadian brandy, per proof gal.	3·00
Except Spirits as follows:—	
(*a*) Used in a bonded manufactory for medicines, extracts, etc., per proof gal.	1·50
(*b*) Used in a bonded manufactory for perfumes, per proof gal.	1·50
(*c*) Used in a bonded manufactory for vinegar, per proof gal.	0·27
(*d*) Used for chemical compositions approved by Governor in Council, per proof gal.	0·15
(*e*) Sold to licensed druggists for pharmaceutical preparations, per proof gal.	1·50
(*f*) Distilled from native fruits and used by a licensed wine manufacturer for fortification of native wines, per proof gal.	Free
2. Spirits imported (in addition to any of the duties otherwise imposed), per proof gal.	0·30
3. Beer or Malt Liquor:—	
(*a*) Brewed in whole or part from any substance other than malt, per gal.	$ 0·22
(*b*) Imported (in addition to any of the duties otherwise imposed), per gal.	0·07
4. Malt:—	
(*a*) Produced in Canada and screened, per lb.	0·06
(*b*) Imported, per lb.	0·06
(*c*) Imported, crushed or ground, per lb.	0·08
5. Malt Syrup:—	
(*a*) Produced in Canada, per lb.	0·10
(*b*) Imported, per lb.	0·16
6. Tobacco, Cigars, and Cigarettes:—	
(*a*) Manufactured tobacco, per lb.	0·20
(*b*) Cigarettes weighing not more than 3 lb. per M, per M	4·00
(*c*) Cigarettes, weighing more than 3 lb. per M, per M	11·00
(*d*) Cigars, per M	3·00

A drawback of 99 p.c. of the duty may be granted when domestic spirits, testing not less than 50 p.c. over proof, are delivered in limited quantities to universities, scientific or research laboratories, or to any *bona fide* public hospital for medicinal purposes only.

Revenue from Excise Duties.—The inland revenue collected from excise duties, other than War taxes, is shown by items for the past six fiscal years in Table **18.** Tobacco, including cigarettes, is shown by the figures to have supplied about 61 p.c. of the revenue from excise duties in the fiscal year 1938.

18.—Details of Excise Duties Collected, fiscal years 1933-38.

(As shown in the Report of the Commissioner of Excise.)

Note.—Dashes in this table indicate that no revenue was collected under the corresponding heads because the items were not applicable in the years indicated.

Item.	1933.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$	$
Spirits	7,201,375	7,176,513	8,155,162	7,401,581	8,316,669	9,844,227
Validation fee	-	323,482	443,550	600,417	1,055,719	918,607
Beer or malt liquor	302,539	234,877	1,143,910	408,760	390,277	363,208
Malt syrup	-	-	168,705	163,710	160,175	132,210
Malt	2,875,779	2,773,984	6,263,464	7,691,832	8,050,380	8,852,924
Tobacco (incl. cigarettes)	29,330,598	25,857,511	27,903,910	28,678,512	28,334,748	32,428,275
Cigars	368,352	347,803	376,136	373,668	372,058	409,010
Licences	44,863	54,710	45,201	40,540	38,891	38,557
Totals	**40,123,506**	**36,768,880**	**44,500,038**	**45,359,020**	**46,718,917**	**52,987,018**

Statistics of Licences and Distillation.—As a by-product of the collection of excise duties, statistics are compiled of excise licences issued and of distillation; figures for recent years are given in Table **19.**

19.—Statistics of Distillation, fiscal years 1933-38.

Schedule.	1933.	1934.	1935.	1936.	1937.	1938.
Licences issued No.	24	20	18	18	18	19
Licence fees $	6,250	5,750	5,000	4,750	4,500	5,250
Grain, etc., for Distillation—						
Malt lb.	6,807,119	8,259,033	3,878,133	6,460,673	8,674,360	11,476,111
Indian corn "	17,871,546	27,497,313	22,508,624	32,961,102	52,575,085	72,192,878
Rye "	17,552,045	13,929,865	4,772,654	7,128,903	10,440,518	11,076,495
Other grain "	17,125	121,208	119,000	192,098	328,960	392,124
Totals, Grain Used "	42,247,835	49,807,419	31,278,411	46,742,776	72,018,923	95,137,608
Molasses used "	39,272,923	69,111,370	48,550,415	74,932,898	87,235,183	88,986,256
Wine and other materials "	3,071,695	1,525,833	2,387,528	304,531	2,247,560	4,160,731
Proof spirits manufactured proof gal.	4,345,834	6,411,230	4,321,457	6,553,190	8,723,005	10,198,330
Duty Collected Ex-manufactory on Deficiencies and Assessment—						
Amount proof gal.	575	297	80	664	678	848
Duty $	5,187	2,076	559	2,655	2,942	3,391
Totals, duties collected plus licence fees $	11,437	7,826	5,559	7,405	7,442	8,641

It will be seen from the above table that the quantity of spirits manufactured increased between 1933 and 1938 from 4,345,834 proof gal. to 10,198,330 proof gal. The statistics have fluctuated greatly since 1920, varying from the low of 2,356,329 proof gal. in that year to the high of 16,816,312 proof gal. recorded in 1929.

Alcohol and Tobacco Taken Out of Bond.—In Table **20** are shown the quantities of spirits, malt liquor, malt, cigars, cigarettes, and tobacco taken out of bond for consumption in the fiscal years ended 1920 to 1938.

Between 1920 and 1938 the number of cigars taken out of bond fell from 270,089,761 to 136,275,443 and the quantity of tobacco, which was 23,049,012 lb. in 1920, had fallen to 20,870,651 lb. by 1925, since when there was a steady increase to 25,155,143 lb. in 1938. The consumption of cigarettes increased from 1,553,468,890 in 1919 to 5,082,314,590 in 1931 but thereafter showed a decline. After 1935, however, consumption reached new records.

Between 1923 and 1929 spirits taken out of bond (exclusive of imported spirits) rose from 729,678 gal. to 2,016,802 gal., but there was a decided and steady drop to 769,527 gal. for 1933. Since 1933 substantial increases have been shown. Malt liquor showed an increase from 36,789,195 gal. in 1923 to 65,719,129 gal. in 1929 but there was a decrease to 40,105,883 for 1934; since then there has been a steady increase to the high point of 67,019,336 gal. in 1938.

20.—Quantities of Spirits, Malt Liquor, Malt, and Tobacco Taken Out of Bond for Consumption, fiscal years 1920-38.

NOTE.—For years prior to 1900, see 1916-17 Year Book, p. 528; for 1901-10, see 1933 Year Book, p. 840; and for 1911-19, the 1938 Year Book, p. 855.

Fiscal Year.	Spirits.	Malt Liquor.	Malt.	Cigars.	Cigarettes.	Tobacco.[1]
	gal.	gal.	lb.	No.	No.	lb.
1920	3,816,124[2]	36,863,867	69,975,631	270,089,761	2,440,982,912	23,049,012
1921	2,816,071[2]	35,509,757	82,210,351	214,262,197	2,439,832,278	19,389,268
1922	730,474	38,404,346	87,561,176	181,255,533	2,450,397,154	20,528,228
1923	729,678	36,789,195	84,922,024	183,965,151	1,917,773,908	22,072,709
1924	899,291	43,717,823	105,446,169	198,042,909	2,420,052,731	21,172,307
1925	910,316	48,106,177	118,237,385	168,097,387	2,531,693,150	20,870,651
1926	1,082,785	52,443,505	127,789,729	174,363,188	2,883,448,160	21,595,483
1927	1,404,111	51,726,251	126,967,976	175,335,838	3,333,999,860	21,589,772
1928	1,896,357	58,391,360	142,543,947	181,730,614	3,927,022,325	21,907,747
1929	2,016,802	65,719,129	158,490,019	190,981,166	4,607,500,425	21,973,221
1930	1,926,063	62,992,156	149,746,711	196,251,957	5,035,878,655	22,195,455
1931	1,180,536	58,641,404	137,997,652	177,841,987	5,082,314,590	22,520,345
1932	781,612	52,001,768	121,257,234	152,159,301	4,401,628,765	22,801,035
1933	769,527	40,632,084	95,604,954	122,664,715	3,728,832,089	22,815,839
1934	933,946	40,105,883	92,319,768	115,988,080	4,342,728,835	22,315,295
1935	1,063,928	51,703,781	117,985,480	125,519,841	4,958,250,855	22,891,129
1936	1,621,286	56,913,069	128,204,424	124,570,870	5,310,132,016	23,113,501
1937	1,900,714	59,920,298	134,154,965[3]	123,956,872	5,855,935,609	24,122,763
1938	2,302,210	67,019,336	147,568,751	136,275,443	6,848,693,442	25,155,143

[1] Including snuff. [2] Exclusive of imported spirits but inclusive of non-potable spirits. [3] Revised since the publication of the 1938 Year Book.

Subsection 5.—Subsidies and Loans to Provinces.

Subsidies.—By the provisions of the British North America Act and subsequent arrangements entered into from time to time, the Dominion is required to make certain annual payments to the individual provinces. These payments fall into the following classes:—

Interest on Debt Allowances.—By the terms of the union of the provinces at Confederation in 1867, the Dominion assumed all the outstanding debts and liabilities of the provinces and undertook to pay, except in the case of Ontario and Quebec, interest at 5 p.c. on the amounts by which the actual per capita indebtedness of the provinces fell short of a basic debt allowance calculated at approximately $25 per capita. On the subsequent entry of additional provinces into Confederation, similar arrangements were effected regarding the assumption of their pre-Confederation indebtedness. From time to time, adjustments have been made in the basis of calculation of the debt allowances of the various provinces and the Dominion pays interest at 5 p.c. per annum on the amounts by which the actual debts of the provinces, on their entry into Confederation, fell short of the allowed debts as adjusted. The aggregate annual payment from the Dominion to the provinces in respect of interest on debt allowances is $1,609,386.

Allowances for Government and Legislature.—Under the terms of the Union, annual grants of specific amounts were made to the various provinces for the support of their governments and legislatures. These fixed amounts vary with the population of the provinces according to the following scale, approved in 1907:—

Where population is—	$
Under 150,000	100,000
150,000, but does not exceed 200,000	150,000
200,000, " " 400,000	180,000
400,000, " " 800,000	190,000
800,000, " " 1,500,000	220,000
Over 1,500,000	240,000

The aggregate annual allowances presently paid under this head amount to $1,750,000.

Allowances per Head of Population.—Under the British North America Act of 1867, a grant of 80 cents per head of the population was allowed to each province. The British North America Act of 1907 provided that the grant would be paid to each province at the rate of 80 cents per head up to a population of 2,500,000, and at the rate of 60 cents per head for so much of the population as exceeds that number. The cost to the Dominion in 1938 of the annual allowances paid to the provinces per head of population was $8,095,070.

Special Grants.—In the case of certain of the provinces, grants have been added to the original scale of subsidies in view of special circumstances obtaining, which, for the fiscal year 1938, amounted in aggregate to $2,280,880 as set forth below:—

> *Prince Edward Island.*—A special grant of $195,000 less a deduction of $39,120 (net grant of $155,880).
>
> *New Brunswick.*—An annual grant of $150,000 since 1875 in consideration of the repeal of lumber duties reserved to the provinces by the B.N.A. Act of 1867.
>
> *Manitoba.*—A special grant on the basis of population amounting at present to $562,500 per annum.
>
> *Saskatchewan and Alberta.*—Currently receiving an annual sum as compensation for loss of revenue derivable from their Public Lands, based on their respective populations which amounts, in the case of Saskatchewan, to $750,000 per annum at present and, in the case of Alberta, to $562,500.
>
> *British Columbia.*—A special grant amounting at present to $100,000 per annum.

Other Special Grants.—In addition to the above, there are other special grants paid to the Maritime Provinces and British Columbia which are voted annually, aggregating, in the fiscal year 1938, $3,225,000 as follows:—

	$
Prince Edward Island	275,000
Nova Scotia	1,300,000
New Brunswick	900,000
British Columbia	750,000

Temporary grants were made to the Provinces of Manitoba and Saskatchewan in the amounts of $750,000 and $3,500,000, respectively, in the fiscal year 1938.

21.—Subsidies of Dominion to Provincial Governments, fiscal years 1933-38.

Province.	1933.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$	$
Prince Edward Island[1]	381,932	381,932	381,932	381,932	381,932	381,932
Nova Scotia[1]	644,256	653,048	653,048	653,048	653,048	653,048
New Brunswick[1]	693,040	693,040	693,040	693,040	693,040	693,040
Quebec	2,592,014	2,592,014	2,592,014	2,592,014	2,592,014	2,592,014
Ontario	2,941,424	2,941,424	2,941,424	2,941,424	2,941,424	2,941,424
Manitoba	1,694,195	1,705,340	1,716,484	1,716,484	1,703,022	1,703,092[1]
Saskatchewan	2,112,803	2,128,889	2,144,975	2,144,975	2,120,084	2,120,095[1]
Alberta	1,743,159	1,757,317	1,771,475	1,771,475	1,776,071	1,776,130
British Columbia	874,561	874,561	874,561[1]	874,561[1]	874,561[1]	874,561[1]
Totals	**13,677,384**	**13,727,565**	**13,768,953**	**13,768,953**	**13,735,196**	**13,735,336**

[1] Additional special and temporary grants, not included in this table, are paid to Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, and British Columbia. The amounts of such special grants voted in 1938 are stated in the text immediately preceding this table.

22.—Total of Subsidy Allowances to Provincial Governments, from July 1, 1867, to Mar. 31, 1938.

Province.	Allowances for Government.	Allowances on Basis of Population.	Special Grants.[1]	Interest On Debt Allowances.[2]	Total.[3]
	$	$	$	$	$
Prince Edward Island	4,120,000	5,574,491	5,287,824	2,719,214	17,701,529
Nova Scotia	8,290,000	24,953,117	826,980	3,393,794	37,463,891
New Brunswick	7,650,000	19,084,377	10,380,000	1,503,495	38,617,872
Quebec	10,240,000	91,329,745	Nil	5,706,635	107,276,380
Ontario	10,640,000	112,315,027	“	5,455,762	128,410,789
Manitoba	7,495,000	19,051,331	22,144,233	14,876,956	63,567,520
Saskatchewan	6,376,667	18,332,242	20,031,250	13,377,375	58,117,534
Alberta	5,916,666	14,409,294	17,343,750	13,377,375	51,047,085
British Columbia	6,890,000	14,399,009	7,700,000	1,962,905	30,951,914
Totals	**67,618,333**	**319,448,632**	**83,714,037**	**62,373,511**	**533,154,514**

[1] Compensation for lands and allowances for buildings. [2] Allowances in lieu of debt. [3] Does not include special and temporary grants paid to Maritime Provinces, Manitoba, Saskatchewan, and British Columbia.

Loans to Provinces.—All of the provincial loans recently advanced by the Dominion have been made to the western provinces under the authority of relief legislation beginning with the Unemployment and Farm Relief Act, 1931, and these have been secured by interest-bearing treasury bills of the respective provinces, the rate being 3 p.c. since July 1, 1936. The sum total of such loans outstanding as at Mar. 31, 1939, was $163,300,825 less write-offs of $18,487,055, making net loans outstanding $144,813,770.

In addition to these, however, there were also outstanding at that date $3,203,000 of housing loans, being the balance of loans made to the provinces in the years following the Great War, on the authority of Orders in Council passed in 1918 and 1919, and of the Appropriation Acts of 1920 and 1921. Upon these loans the province of Ontario repaid the whole of the advances in 1928. The province of Quebec repaid in full in 1937 and New Brunswick in full in 1938. The other provinces concerned have in most cases reduced their indebtedness from year to year.

Table 23 gives details of the loans made by the Dominion Government to the provinces concerned on account of relief expenditures, and Table 24 shows the amounts outstanding as at Mar. 31, of each of the years 1920-39, on account of loans made for housing.

23.—Loans to Provincial Governments Under the Relief Acts, by Provinces, fiscal years 1935-39.

Note.—Figures for 1932 (the first year such loans were made) and 1933 will be found at p. 844 of the 1936 Year Book, and for 1934 at p. 858 of the 1938 edition.

Province and Item.	1935.	1936.	1937.	1938.	1939.
	$	$	$	$	$
Manitoba—					
Loans during year	4,127,000	4,720,655	4,627,000	2,982,000	2,312,000
Less cash repayments and credits of Dominion's share of expenditures	1,252,369	2,324,429	1,000	22,812	906,501
Net loans for year	2,874,631	2,396,226	4,626,000	2,959,188	1,405,499
Net loans outstanding at beginning of year	10,233,999	13,108,630	15,504,856	20,130,856	23,090,044
Totals Outstanding Mar. 31	**13,108,630**	**15,504,856**	**20,130,856**	**23,090,044**	**24,495,543**
Saskatchewan—					
Loans during year	11,434,811	14,291,043	6,059,461	11,604,787	13,767,910
Less cash repayments and credits of Dominion's share of expenditures	1,293,797	45,565	582	Nil	31,332
Net loans for year	10,141,014	14,245,478	6,058,879	11,604,787	13,736,578
Net loans outstanding at beginning of year	23,982,137	34,123,151	48,368,629	54,427,508	66,032,295
Totals Outstanding Mar. 31	**34,123,151**	**48,368,629**	**54,427,508**	**66,032,295**	**79,768,873**
Alberta—					
Loans during year	3,895,000	13,117,000	974,450	200,000	Nil
Less cash repayments and credits of Dominion's share of expenditures	1,968,524	13,000	169,252	7,000	"
Net loans for year	1,926,476	13,104,000	805,198	193,000	Nil
Net loans outstanding at beginning of year	10,050,524	11,977,000	25,081,000	25,886,198	26,079,198
Totals Outstanding Mar. 31	**11,977,000**	**25,081,000**	**25,886,198**	**26,079,198**	**26,079,198**
British Columbia—					
Loans during year	8,225,000	12,566,000	4,044,000	2,000,000	Nil
Less cash repayments and credits of Dominion's share of expenditures	258,286	7,554	71,600	458,363	129,506
Net loans for year	7,966,714	12,558,446	3,972,400	1,541,637	−129,506
Net loans outstanding at beginning of year	7,047,520	15,014,234	27,572,680	31,545,080	33,086,717
Totals Outstanding Mar. 31	**15,014,234**	**27,572,680**	**31,545,080**	**33,086,717**	**32,957,211**
Grand Totals	**74,223,015**	**116,527,165**	**131,989,642**[1]	**148,288,254**[1]	**163,300,825**[1]

[1] Less write-offs as follows: Manitoba, $804,897; Saskatchewan, $17,682,158; leaving net loans outstanding at Mar. 31, 1937, of $113,502,587; at Mar. 31, 1938, of $129,801,199; and at Mar. 31, 1939, of $144,813,770.

24.—Loans to Provincial Governments Outstanding, on Account of Housing, by Provinces, as at Mar. 31, 1920-39.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	British Columbia.	Total.
	$	$	$	$	$	$	$	$
1920	Nil	Nil	600,000	60,000	8,750,000	1,580,000	750,000	11,740,000
1921	"	600,000	1,220,000	1,146,700	8,750,000	1,580,000	1,361,500	14,658,200
1922	"	1,100,000	1,525,000	2,312,885	8,750,000	1,975,000	1,701,500	17,364,385
1923	50,000	1,537,000	1,525,000	4,391,617	9,350,000	1,975,000	1,701,500	20,530,117
1924	50,000	1,537,000	1,525,000	7,359,590	9,350,000	1,975,000	1,701,500	23,498,090
1925	50,000	1,537,000	1,525,000	7,355,305	9,350,000	1,975,000	1,701,500	23,493,805
1926	50,000	1,537,000	1,462,000	7,352,018	9,350,000	1,975,000	1,701,500	23,427,518
1927	50,000	1,537,000	1,308,000	7,337,843	9,350,000	1,825,000	1,701,500	23,109,343
1928	50,000	1,362,000	1,250,000	7,317,403	Nil	1,660,000	1,701,500	13,340,903
1929	50,000	1,212,000	1,198,000	7,304,203	"	1,600,000	1,701,500	13,065,703
1930	50,000	1,077,000	1,136,000	5,796,703	"	1,550,000	1,701,500	11,311,203
1931	36,500	1,017,000	1,057,000	5,384,688	"	1,475,000	1,701,500	10,671,688
1932	35,000	937,000	988,000	5,384,688	"	1,475,000	1,701,500	10,521,188
1933	34,000	877,000	910,000	5,384,688	"	1,475,000	1,701,500	10,382,188
1934	33,000	822,000	860,500	5,384,688	"	1,367,000	1,701,500	10,168,688
1935	33,000	757,000	800,000	5,384,688	"	1,095,000	1,701,500	9,771,188
1936	31,500	682,000	648,700	2,609,688	"	1,095,000	1,701,500	6,768,388
1937	30,500	607,000	588,700	730,688	"	1,072,000	1,701,500	4,730,388
1938	29,500	537,000	Nil	Nil	"	1,040,000	1,701,500	3,308,000
1939	29,500	457,000	"	"	"	1,015,000	1,701,500	3,203,000

Subsection 6.—The National Debt.

The gross national debt of Canada on Mar. 31, 1914, was $544,391,369, as against assets of $208,394,519, leaving a net debt of $335,996,850. Comparatively small as was this debt, it was a debt incurred almost altogether either for public works of general utility which, like the Intercolonial and transcontinental railways and the canal system, remained assets, though perhaps not realizable assets of the nation, or was expended as subsidies to enterprises, which, like the Canadian Pacific Railway, though not government-owned, assisted greatly in extending the area of settlement as well as the productive and, therefore, the taxable capacity of the country. Broadly speaking, it was a debt incurred for productive purposes. Also, it was mainly held outside the country, the principal of the Dominion funded debt payable in London being $302,842,485 on Mar. 31, 1914, as against only $717,453 payable in Canada.

The great changes brought about in our national debt during the 25 years from 1914 to 1938 have been: (1) the enormous increase in net debt from $335,996,850 to $3,101,667,570; (2) the gross debt, having been largely incurred for War purposes is not represented by corresponding assets; (3) the debt is now mainly held in Canada, $2,455,690,435 being payable in Canada at Mar. 31, 1938.

Recent Funded Debt Operations.—Conversions and other national debt operations carried out between 1914 and 1930 are dealt with at pp. 842-843 of the 1933 Year Book; those between 1931 and 1934 at pp. 905-907 of the 1934-35 Year Book; those of the fiscal year 1935 on pp. 845-846 of the 1936 Year Book; and those of the fiscal year 1937 on p. 837 of the 1937 Year Book. The following review carries the summary down to Mar. 31, 1939.

On May 5, 1937, an issue of $113,500,000 was made in Canada for the purpose of converting a part of the $236,299,800 5½ p.c. Victory Loan due Dec. 1, 1937. This issue was a conversion operation only, no cash applications being accepted. The new issue was comprised of three maturities, 1 p.c. two-year bonds due June 1, 1939, 2 p.c. five-year bonds due June 1, 1942, and 3¼ p.c. twelve-year bonds due June 1, 1949, yielding 1·38 p.c., 2·375 p.c., and 3·35 p.c., respectively, to the purchaser.

To provide a part of the funds to pay off the unconverted portion of the 5½ p.c. Victory Loan Bonds, an issue of $100,000,000 was made in Canada on Nov. 3, 1937. This issue was also in three maturities, 1 p.c. one and one-half-year bonds due June 1, 1939, 2½ p.c. seven-year bonds due Nov. 15, 1944, and 3¼ p.c. fourteen-year bonds due Nov. 15, 1951, yielding 1·59 p.c., 2·74 p.c., and 3·34 p.c., respectively. The $33,293,000 4 p.c. school land debentures due July 1, 1937, and held by the provinces of Manitoba, Saskatchewan, and Alberta, were renewed for a further period of one year at an interest rate of 4 p.c.

In January, 1938, the Dominion offered an issue in the London market for conversion of £7,658,472 Dominion of Canada 3 p.c. Inscribed Stock and Bonds and £3,093,700 Dominion of Canada, Canadian Pacific Railway 3½ p.c. Land Grant Stock and Bonds, both of which issues were coming to maturity on July 1. The new issue in the amount of £10,000,000 ($48,666,667) bearing interest at 3¼ p.c., and maturing on July 1, 1963, was offered at £98:10s. (98·5 p.c.). The yield to the public was approximately 3·34 p.c.

On May 18, 1938, the Dominion Government offered in Canada an issue of $50,000,000 in bonds of two maturities, dated June 1, 1938. A six-year 2 p.c. bond due June 1, 1944, priced at 99·375 and accrued interest and yielding approximately

2·11 p.c. was offered in the amount of $20,000,000, and a twenty-year 3 p.c. bond, due June 1, 1958, priced at 99·00 and accrued interest, and yielding approximately 3·07 p.c. comprised the remaining $30,000,000. In addition to the $50,000,000 of new money called for, the holders of 2 p.c. bonds due Oct. 15, 1938 (outstanding in an amount of $90,000,000), were given the opportunity of conversion into bonds of the new issue, the outstanding maturity being convertible, with final coupons attached, at 100·80 p.c. in exchange for the new bonds at the offering price. Under this offering, conversions were made to the extent of $89,825,000, all but $175,000 of the outstanding issue being refunded. The conversion subscriptions were allotted between the offering maturities in the amount of $70,625,000 for the six-year 2 p.c. bonds, and $19,200,000 for the twenty-year 3 p.c. bonds. Thus, the total amount outstanding of the former maturity is $90,625,000, and of the latter, $49,200,000.

On July 1, 1938, the School Land Debenture Stock, held by the western provinces in the amount of $33,293,471, matured and was renewed for another year at the prevailing rate of 4 p.c.

For the purpose of meeting a New York maturity of $40,000,000 in 2 p.c. notes issued Jan. 1, 1936, and falling due on Jan. 1, 1939, the Dominion Government on Nov. 17, 1938, sold an issue of thirty-year 3 p.c. bonds in the amount of $40,000,000 in New York. These bonds were priced at 97¼ and accrued interest, yielding approximately 3·14 p.c.

In the past four years a market for short-term treasury bills has been built up in Canada which has proven highly satisfactory. Each issue has, with two exceptions (where the bills were sold direct to the Bank of Canada), been offered for public tender. A complete list of treasury bills sold by public tender for the period Mar. 1, 1934, to Feb. 15, 1937, appears on p. 838 of the 1937 Year Book. The sales since that date are as follows:—

TREASURY BILLS SOLD IN CANADA, MAR. 1, 1937, TO MAR. 31, 1939.

Date of Issue.	Date of Maturity.	Amount.	Average Cost.	Date of Issue.	Date of Maturity.	Amount.	Average Cost.
		$	p.c.			$	p.c.
Mar. 1, 1937	June 1, 1937	20,000,000	0·795	Apr. 1, 1938	June 30, 1938	25,000,000	0·510
Mar. 15, 1937	June 15, 1937	25,000,000	0·805	Apr. 14, 1938	July 15, 1938	30,000,000	0·503
Apr. 1, 1937	July 2, 1937	25,000,000	0·786	Apr. 30, 1938	July 30, 1938	30,000,000	0·490
Apr. 15, 1937	July 15, 1937	25,000,000	0·771	May 16, 1938	Aug. 15, 1938	25,000,000	0·471
May 1, 1937	July 31, 1937	20,000,000	0·749	June 1, 1938	Sept. 1, 1938	25,000,000	0·466
May 15, 1937	Aug. 16, 1937	20,000,000	0·715	June 15, 1938	Sept. 15, 1938	25,000,000	0·465
June 1, 1937	Sept. 1, 1937	20,000,000	0·678	June 30, 1938	Sept. 30, 1938	25,000,000	0·479
June 15, 1937	Sept. 15, 1937	25,000,000	0·643	July 15, 1938	Oct. 14, 1938	30,000,000	0·489
July 2, 1937	Oct. 1, 1937	25,000,000	0·634	July 30, 1938	Nov. 1, 1938	25,000,000	0·501
July 15, 1937	Oct. 15, 1937	25,000,000	0·632	Aug. 15, 1938	Nov. 15, 1938	25,000,000	0·519
July 31, 1937	Nov. 1, 1937	25,000,000	0·633	Sept. 1, 1938	Dec. 1, 1938	25,000,000	0·532
Aug. 16, 1937	Nov. 15, 1937	25,000,000	0·636	Sept. 15, 1938	Dec. 15, 1938	25,000,000	0·608
Sept. 1, 1937	Dec. 1, 1937	25,000,000	0·628	Sept. 30, 1938	Dec. 30, 1938	25,000,000	0·760
Sept. 15, 1937	Dec. 15, 1937	25,000,000	0·632	Oct. 14, 1938	Jan. 13, 1939	30,000,000	0·747
Oct. 1, 1937	Dec. 31, 1937	25,000,000	0·660	Nov. 1, 1938	Feb. 1, 1939	25,000,000	0·717
Oct. 15, 1937	Jan. 14, 1938	25,000,000	0·696	Nov. 15, 1938	Feb. 15, 1939	25,000,000	0·693
Nov. 1, 1937	Feb. 1, 1938	25,000,000	0·781	Dec. 1, 1938	Mar. 1, 1939	25,000,000	0·675
Nov. 15, 1937	Feb. 15, 1938	25,000,000	0·816	Dec. 15, 1938	Mar. 15, 1939	25,000,000	0·672
Dec. 1, 1937	Mar. 1, 1938	25,000,000	0·785	Dec. 30, 1938	Mar. 31, 1939	25,000,000	0·681
Dec. 15, 1937	Mar. 15, 1938	25,000,000	0·761	Jan. 13, 1939	Apr. 14, 1939	30,000,000	0·690
Dec. 31, 1937	Apr. 1, 1938	25,000,000	0·744	Feb. 1, 1939	May 1, 1939	25,000,000	0·691
Jan. 14, 1938	Apr. 14, 1938	25,000,000	0·726	Feb. 15, 1939	May 15, 1939	25,000,000	0·680
Feb. 1, 1938	Apr. 30, 1938	25,000,000	0·700	Mar. 1, 1939	June 1, 1939	25,000,000	0·669
Feb. 15, 1938	May 16, 1938	25,000,000	0·648	Mar. 15, 1939	June 15, 1939	25,000,000	0·655
Mar. 1, 1938	June 1, 1938	25,000,000	0·584	Mar. 31, 1939	June 30, 1939	25,000,000	0·643
Mar. 15, 1938	June 15, 1938	25,000,000	0·524				

Statistics of National Debt.—Summary statistics of the national debt of Canada as at Confederation, and at the end of each fiscal year thereafter down to 1938, are given in Table 25, while details of the active assets and of the gross liabilities are given, as at the end of each of the past five fiscal years, in Table **1**, pp. 875-876. Further details of the funded debt, showing the various issues of bonds, the annual interest charges and the place at which principal and interest are payable, are given as at Mar. 31, 1938, in Table **26**. From this it appears that the total payable in London at that date was $409,867,597, in New York $449,000,000, and in Canada $2,455,690,435. Thus three-quarters of the funded debt of the Dominion was payable within the Dominion itself, and the interest payable outside of Canada was a comparatively small item.

25.—Summary of the Public Debt of Canada and Interest Payments Thereon, July 1, 1867, to Mar. 31, 1938.

Fiscal Year.	Gross Debt.	Total Assets.	Net Debt.	Net Debt Per Capita.[1]	Increase or Decrease of Debt during Year.[2]	Interest Paid on Debt.	Interest Received from Active Assets.	Interest Paid Per Capita.[1]
	$	$	$	$	$	$	$	$
1867..	93,046,052	17,317,410	75,728,642	21·87	–	–	–	–
1868..	96,896,666	21,139,531	75,757,135	21·58	28,493	4,501,568	126,420	1·28
1869..	112,361,998	36,502,679	75,859,319	21·28	102,184	4,907,014	313,021	1·38
1870..	115,993,706	37,783,964	78,209,742	21·58	2,350,423	5,047,054	383,956	1·39
1871..	115,492,683	37,786,165	77,706,518	21·06	−503,225	5,165,304	554,384	1·40
1872..	122,400,179	40,213,107	82,187,072	21·89	4,480,554	5,257,231	488,042	1·40
1873..	129,743,432	29,894,970	99,848,462	26·10	17,661,390	5,209,206	396,404	1·36
1874..	141,163,551	32,838,587	108,324,964	27·81	8,476,502	5,724,436	610,863	1·47
1875..	151,663,402	35,655,024	116,008,378	29·34	7,683,414	6,590,790	840,887	1·67
1876..	161,204,688	36,653,174	124,551,514	31·07	8,543,136	6,400,902	798,906	1·60
1877..	174,675,835	41,440,526	133,235,309	32·78	8,683,795	6,797,227	717,684	1·67
1878..	174,957,269	34,595,199	140,362,070	34·07	7,126,761	7,048,884	605,774	1·71
1879..	179,483,871	36,493,684	142,990,187	34·17	2,628,117	7,194,734	592,500	1·72
1880..	194,634,441	42,182,852	152,451,589	35·83	9,461,402	7,773,869	834,793	1·83
1881..	199,861,537	44,465,757	155,395,780	35·93	2,944,191	7,594,145	751,513	1·76
1882..	205,365,252	51,703,601	153,661,651	35·12	−1,734,129	7,740,804	914,009	1·77
1883..	202,159,104	43,692,390	158,466,714	35·77	4,805,063	7,668,552	1,001,193	1·73
1884..	242,482,416	60,320,566	182,161,850	40·60	23,695,136	7,700,181	986,698	1·72
1885..	264,703,607	68,295,915	196,407,692	43·29	14,245,842	9,419,482	1,997,936	2·08
1886..	273,164,341	50,005,234	223,159,107	48·72	26,751,415[3]	10,137,009	2,299,079	2·21
1887..	273,187,626	45,872,851	227,314,775	49·14	4,155,668	9,682,929	990,887	2·09
1888..	284,513,842	49,982,484	234,531,358	50·13	7,216,583	9,823,313	932,025	2·10
1889..	287,722,063	50,192,021	237,530,042	50·23	2,998,684	10,148,932	1,305,392	2·15
1890..	286,112,295	48,579,083	237,533,212	49·70	3,170	9,656,841	1,082,271	2·02
1891..	289,899,230	52,090,199	237,809,031	49·21	275,819	9,584,137	1,077,228	1·98
1892..	295,333,274	54,201,840	241,131,434	49·38	3,322,403	9,763,978	1,086,420	2·00
1893..	300,054,525	58,373,485	241,681,040	49·01	549,606	9,806,888	1,150,167	1·99
1894..	308,348,023	62,164,994	246,183,029	49·44	4,501,989	10,212,596	1,217,809	2·05
1895..	318,048,755	64,973,828	253,074,927	50·35	6,891,898	10,466,294	1,336,047	2·08
1896..	325,717,537	67,220,104	258,497,433	50·95	5,422,506	10,520,430	1,370,001	2·07
1897..	332,530,131	70,991,535	261,538,596	51·06	3,041,163	10,645,663	1,443,004	2·08
1898..	338,375,984	74,419,585	263,956,399	51·01	2,417,803	10,516,758	1,513,455	2·03
1899..	345,160,903	78,887,456	266,273,447	50·86	2,317,048	10,855,112	1,590,448	2·07
1900..	346,206,980	80,713,173	265,493,807	50·08	−779,640	10,699,645	1,683,051	2·02
1901..	354,732,433	86,252,429	268,480,004	49·99	2,986,197	10,807,955	1,784,834	2·01
1902..	366,358,477	94,529,387	271,829,090	49·48	3,349,086	10,975,935	1,892,224	2·00
1903..	361,344,098	99,737,109	261,606,989	46·29	−10,222,101[4]	11,068,139	2,020,953	1·96
1904..	364,962,512	104,094,793	260,867,719	44·77	−739,270[5]	11,128,637	2,236,256	1·91
1905..	377,678,580	111,454,413	266,224,167	44·36	5,356,448	10,630,115	2,105,031	1·77
1906..	392,269,680	125,226,703	267,042,977	43·09	818,810	10,814,697	2,140,312	1·75
1907[6].	379,966,826	116,294,966	263,671,860	41·13	−3,371,117	6,716,771	1,235,746	1·05
1908..	408,207,158	130,246,298	277,960,860	41·96	14,289,000	10,973,597	1,925,569	1·66
1909..	478,535,427	154,605,148	323,930,279	47·64	45,969,419	11,604,584	2,256,643	1·71
1910..	470,663,046	134,394,500	336,268,546	48·12	12,338,267	13,098,161	2,807,465	1·87
1911..	474,941,487	134,899,435	340,042,052	47·18	3,773,506	12,535,851	1,668,773	1·74
1912..	508,338,592	168,419,131	339,919,461	46·00	−122,591	12,259,397	1,281,317	1·66
1913..	483,232,555	168,930,930	314,301,625	41·18	−25,617,836	12,605,882	1,430,511	1·65
1914..	544,391,369	208,394,519	335,996,850	42·64	21,695,225	12,893,505	1,964,541	1·64
1915..	700,473,814	251,097,731	449,376,083	56·31	113,379,233	15,736,743	2,980,247	1·97
1916..	936,987,802	321,831,631	615,156,171	76·88	165,780,088	21,421,585	3,358,210	2·68
1917..	1,382,003,268	502,816,970	879,186,298	109·08	264,030,127	35,802,567	3,094,012	4·44
1918..	1,863,335,899	671,451,836	1,191,884,063	146·28	312,697,765	47,845,585	4,466,724	5·87
1919..	2,676,635,725	1,102,104,692	1,574,531,033	189·45	382,646,970	77,431,432	7,421,002	9·32
1920..	3,041,529,587	792,660,963[7]	2,248,868,624	262·84	674,337,591	107,527,089	17,086,981	12·57
1921..	2,902,482,117	561,603,133[7]	2,340,878,984	266·37	92,010,360	139,551,520	24,815,246	15·88

For footnotes, see end of table, p. 901.

25.—Summary of the Public Debt of Canada and Interest Payments Thereon, July 1, 1867, to Mar. 31, 1938—concluded.

Fiscal Year.	Gross Debt.	Total Assets.	Net Debt.	Net Debt Per Capita.[1]	Increase or Decrease of Debt during Year.[2]	Interest Paid on Debt.	Interest Received from Active Assets.	Interest Paid Per Capita.[1]
	$	$	$	$	$	$	$	$
1922...	2,902,347,137	480,211,335[7]	2,422,135,802	271·57	81,256,817	135,247,849	21,961,513	15·16
1923...	2,888,827,237	435,050,368[7]	2,453,776,869	272·34	31,641,067	137,892,735	16,465,303	15·30
1924...	2,819,610,470	401,827,195[7]	2,417,783,275	264·44	−35,993,594	136,237,872	11,916,479	14·90
1925...	2,818,066,523	400,628,837[7]	2,417,437,686	260·11	−345,589	134,789,604	11,332,328	14·50
1926...	2,768,779,184	379,048,085[7]	2,389,731,099	252·85	−27,706,587	130,691,493	8,535,086	13·83
1927...	2,726,298,717	378,464,347[7]	2,347,834,370	243·65	−41,896,729	129,675,367	8,559,401	13·46
1928...	2,677,137,243	380,287,010[7]	2,296,850,233	233·54	−50,984,137	128,902,945	10,937,822	13·11
1929...	2,647,033,973	421,529,268[7]	2,225,504,705	221·91	−71,345,528	124,989,950	12,227,562	12·46
1930...	2,544,586,411	366,822,452[7]	2,177,763,959	213·34	−47,740,746	121,566,213	13,518,205	11·91
1931...	2,610,265,698	348,653,762[7]	2,261,611,937	217·94	83,847,978	121,289,844	10,421,224	11·69
1932...	2,831,743,563	455,897,390[7]	2,375,846,172	226·14	114,234,236	121,151,106	9,330,125	11·53
1933...	2,996,366,665	399,885,839[7]	2,596,480,826	243·09	220,634,654	134,999,069	11,220,989	12·64
1934...	3,141,042,097	411,063,957[7]	2,729,978,141	251·96	133,497,314	139,725,417	11,148,231	12·91
1935...	3,205,956,369	359,845,411[7]	2,846,110,958	259·94	116,132,817	138,533,202	10,963,478	12·67
1936...	3,431,944,027	425,843,510[7]	3,006,100,517	271·68	159,989,559	134,549,169	10,614,125	12·20
1937...	3,542,521,139	458,568,937[7]	3,083,952,202	277·33	77,851,685	137,410,345	11,231,035	12·36
1938...	3,540,237,614	438,570,044[7]	3,101,667,570	276·71	17,715,368	132,117,422	13,120,523	11·79

---

[1] The per capita figures are based on the official estimates of population given at p. 113. [2] The minus sign (—) denotes a decrease. [3] This amount includes $10,199,520, for which land was taken from the Canadian Pacific Rly. Co. [4] This amount includes $3,305,450, caused by the settlement of accounts with Ontario and Quebec. [5] This amount takes into account $5,397,503, allowed to Ontario and Quebec under 47 Vict., c. 6. [6] Nine months due to change in fiscal year. [7] Active assets only.

26.—Funded Debt and Treasury Bills of the Dominion, Date of Maturity, Rate of Interest Payable Thereon, Centres at which Loans are Payable, Amount of Loans Outstanding, and Total Annual Interest Charges, as at Mar. 31, 1938.

Date of Maturity.	Name of Loan.	Rate.	Where Payable.	Amount of Loan Outstanding.	Annual Interest Charges.
		p.c.		$ cts.	$ cts.
1938—July 1	Debentures—School Lands........	4	Canada.......	33,293,470 85	1,331,738 83
July 1	Loan of 1888— £1,658,471-18-11..............	3	London.......	8,071,230 16	242,136 90
July 1	Loan of 1892—£3,750,000-0-0......	3	London.......	18,250,000 00	547,500 00
July 1	Loan of 1894—£2,250,000-0-0......	3	London.......	10,950,000 00	328,500 00
July 1	C.P.R. Land Grant Loan— £3,093,700-0-0................	3½	London.......	15,056,006 66	526,960 23
Oct. 15	Loan of 1935......................	2	Canada.......	90,000,000 00	1,800,000 00
1939—Jan. 1	Three-year Notes	2	New York....	40,000,000 00	800,000 00
June 1	Conversion Loan, 1937............	1	Canada.......	20,000,000 00	200,000 00
June 1	Refunding Loan, 1937............	1	Canada.......	20,000,000 00	200,000 00
Oct. 15	Refunding Loan, 1933............	4	Canada.......	47,269,500 00	1,890,780 00
Oct. 15	Refunding Loan, 1934............	2½	Canada.......	7,933,000 00	198,325 00
Nov. 15	Loan of 1935......................	2	Canada.......	20,000,000 00	400,000 00
1940—Mar. 1	Loan of 1935......................	3	Canada.......	115,013,636 82	3,450,409 10
June 1	Loan of 1936......................	1½	Canada.......	80,000,000 00	1,200,000 00
Sept. 1	Refunding Loan, 1925............	4½	Canada.......	75,000,000 00	3,375,000 00
1941—Mar. 15	Four and One-half-year Notes	1	Canada.......	45,000,000 00	450,000 00
Nov. 15	National Service Loan, 1931.......	5	Canada.......	141,663,000 00	7,083,150 00
1942—June 1	Conversion Loan, 1937............	2	Canada.......	60,000,000 00	1,200,000 00
Oct. 15	Refunding Loan, 1934............	3	Canada.......	40,409,000 00	1,212,270 00
1943—June 1	Loan of 1935......................	2½	Canada.......	20,000,000 00	500,000 00
Oct. 15	Refunding Loan, 1923............	5	Canada.......	147,000,100 00	7,350,005 00
1944—Jan. 15[1]	Loan of 1937......................	2¼	New York....	30,000,000 00	675,000 00
Oct. 15	Refunding Loan, 1924............	4½	Canada.......	50,000,000 00	2,250,000 00
Nov. 15	Refunding Loan, 1937............	2½	Canada.......	20,000,000 00	500,000 00
1945—Aug. 15[2]	Loan of 1935......................	2½	New York....	76,000,000 00	1,900,000 00
Oct. 15[3]	Refunding Loan, 1933............	4	Canada.......	88,337,500 00	3,533,500 00
1946—Feb. 1	Refunding Loan, 1926............	4½	Canada.......	45,000,000 00	2,025,000 00
1947—Oct. 1	Loan of 1897—£1,004,421-14-2,....	2½	London.......	4,888,185 64	122,204 64
1949—June 1[4]	Conversion Loan, 1937............	3¼	Canada.......	33,500,000 00	1,088,750 00
Oct. 15[5]	Refunding Loan, 1934............	3½	Canada.......	138,322,000 00	4,841,270 00
1950—July 1[6]	Loan of 1930-50—£28,162,775-11-0..	3½	London.......	137,058,841 00	4,797,059 43
1951—Nov. 15[22]	Refunding Loan, 1937............	3¼	Canada.......	60,000,000 00	1,950,000 00
1952—May 1[7]	Loan of 1922......................	5	New York....	100,000,000 00	5,000,000 00
Oct. 15[3]	Loan of 1932......................	4	Canada.......	56,191,000 00	2,247,640 00

For footnotes, see end of table, p. 902.

26.—Funded Debt and Treasury Bills of the Dominion, Date of Maturity, Rate of Interest Payable Thereon, Centres at Which Loans are Payable, Amount of Loans Outstanding, and Total Annual Interest Charges, as at Mar. 31, 1938—concluded.

Date of Maturity.	Name of Loan.	Rate.	Where Payable.	Amount of of Loan Outstanding.	Annual Interest Charges.
		p.c.		$ cts.	$ cts.
1955—May 1[9]	Loan of 1934—£10,000,000-0-0...	3¼	London.......	48,666,666 67	1,581,666 67
June 1[10]	Loan of 1935 dated June 1.......	3	Canada.......	40,000,000 00	1,200,000 00
June 1[10]	Loan of 1935 dated Nov. 15.....	3	Canada.......	55,000,000 00	1,650,000 00
1956—Nov. 1[11]	Conversion Loan, 1931..........	4½	Canada.......	43,125,700 00	1,940,656 50
1957—Nov. 1[12]	Conversion Loan, 1931..........	4½	Canada.......	37,523,200 00	1,688,544 00
1958—Sept. 1[13]	Loan of 1933—£15,000,000-0-0...	4	London.......	73,000,000 00	2,920,000 00
Nov. 1[14]	Conversion Loan, 1931..........	4½	Canada.......	276,687,600 00	12,450,942 00
1959—Nov. 1[15]	Conversion Loan, 1931..........	4½	Canada.......	289,693,300 00	13,036,198 50
1960—Oct. 1[16]	Loan of 1940-60—£19,300,000-0-0.	4	London.......	93,926,666 66	3,757,066 67
Oct. 1[17]	Loan of 1930....................	4	New York....	100,000,000 00	4,000,000 00
1961—Jan. 15[18]	Loan of 1936....................	3¼	New York....	48,000,000 00	1,560,000 00
1966—June 1[19]	Loan of 1936....................	3¼	Canada.......	54,703,000 00	1,777,847 50
Sept. 15[20]	Perpetual Loan of 1936..........	3	Canada.......	55,000,000 00	1,650,000 00
1967—Jan. 15[21]	Loan of 1937....................	3	New York....	55,000,000 00	1,650,000 00
1938—Apr. 1	Treasury Bills..................	·744	Canada.......	25,000,000 00	186,000 00
Apr. 14	Treasury Bills..................	·726	Canada.......	25,000,000 00	181,500 00
April 30	Treasury Bills..................	·700	Canada.......	25,000,000 00	175,000 00
May 16	Treasury Bills..................	·684	Canada.......	25,000,000 00	162,000 00
June 1	Treasury Bills..................	·548	Canada.......	25,000,000 00	146,000 00
June 15	Treasury Bills..................	·524	Canada.......	25,000,000 00	131,000 00
Demand........	Dominion Stock, Issue A........	6	Canada.......	4,000 00	240 00
	Dominion Stock, Issue B.......	3½	Canada.......	9,600 00	336 00
	Compensation to Seigneurs......	6	Canada.......	11,827 40	709 64
				3,314,558,031 86	117,062,906 61
Recapitulation—					
Payable in Canada..........................				2,455,690,435 07	86,654,812 07
Payable in New York........................				449,000,000 00	15,585,000 00
Payable in London..........................				409,867,596 79	14,823,094 54
				3,314,558,031 86	117,062,906 61
Less bonds and stocks of the above loans held as sinking funds..				65,657,699 66	
Net Funded Debt and Treasury Bills...........				**3,248,900,332 20**	

---

[1] Subject to redemption as a whole on or after Jan. 15, 1943, on 30 days' notice.
[2] Subject to redemption in whole or in part on Aug. 15, 1943, or on any subsequent interest date on 30 days' notice.
[3] Subject to redemption as a whole on Oct. 15, 1943, or on any subsequent interest date on 60 days' notice.
[4] Subject to redemption in whole or in part on June 1, 1946, or on any subsequent interest date on 60 days' notice.
[5] Subject to redemption as a whole on Oct. 15, 1944, or on any subsequent interest date on 60 days' notice.
[6] Subject to redemption on 6 months' notice.
[7] Subject to redemption as a whole on or after May 1, 1942, on 60 days' notice.
[8] Subject to redemption as a whole on Oct. 15, 1947, or on any subsequent interest date on 60 days' notice.
[9] Subject to redemption in whole or in part on or after May 1, 1950, on 3 months' notice.
[10] Subject to redemption as a whole on June 1, 1950, or on any subsequent interest date on 60 days' notice.
[11] Subject to redemption as a whole on Nov. 1, 1946, or on any subsequent interest date on 60 days' notice.
[12] Subject to redemption as a whole on Nov. 1, 1947, or on any subsequent interest date on 60 days' notice.
[13] Subject to redemption in whole or in part on or after Sept. 1, 1953, on 3 months' notice.
[14] Subject to redemption as a whole on Nov. 1, 1948, or on any subsequent interest date on 60 days' notice.
[15] Subject to redemption as a whole on Nov. 1, 1949, or on any subsequent interest date on 60 days' notice.
[16] Subject to redemption in whole or in part on or after Oct. 1, 1940, on 3 months' notice.
[17] Subject to redemption as a whole on Oct. 1, 1950, or on any subsequent interest date on 60 days' notice.
[18] Subject to redemption in whole or in part on Jan. 15, 1956, or on any subsequent interest date on 30 days' notice.
[19] Subject to redemption as a whole on June 1, 1956, or on any subsequent interest date on 60 days' notice.
[20] Subject to redemption in whole or in part on or after Sept. 15, 1966, on 60 days' notice.
[21] Subject to redemption in whole or in part on any interest date on 60 days' notice as follows: to and including Jan. 15, 1942, at 105 p.c.; thereafter to and including Jan. 15, 1947, at 104 p.c.; thereafter to and including Jan. 15, 1952, at 103 p.c.; thereafter to and including Jan. 15, 1957, at 102 p.c.; thereafter to and including Jan 15, 1962, at 101 p.c.; thereafter at 100 p.c.
[22] Subject to redemption in whole or in part on Nov. 15, 1948, or on a subsequent interest date on 60 days' notice.

The Interest-Bearing Debt of Canada.—Something of the extent of the burden of national debt being carried by the Canadian people may be realized from the fact that, for the fiscal year ended Mar. 31, 1938, the interest charges on the total interest-bearing debt amounted to about 28 p.c. of the total receipts from taxation and nearly 25 p.c. of the receipts from all sources.

Before the Great War, interest rates were comparatively moderate, but the unprecedented expenditure of the world's capital in that gigantic struggle led, in all the participating countries, to the raising of enormous loans at comparatively high rates of interest, which in many cases still have to be paid until refunding becomes possible under the terms of the contracts made between the nations and their creditors. Thus, in Canada, the average rate of interest paid upon the direct interest-bearing obligations of the nation, which was only 3·368 p.c. at Mar. 31, 1913, rose to 5·164 p.c. at Mar. 31, 1922, and fell gradually to 3·560 p.c. at Mar. 31, 1938. Details of the interest-bearing debt of Canada, and the interest charges thereon, as at Mar. 31 of the years from 1913 to 1938 are given in Table **27.**

27.—The Interest-Bearing Debt, the Annual Interest Charge Thereon and the Average Rate of Interest, as at Mar. 31, 1913-38.

Fiscal Year.	Bonds, Debentures, and Treasury Bills.	Annual Interest Charges on Bonds, Debentures, and Treasury Bills.	Average Interest Rate on Bonds, Debentures, and Treasury Bills.	Savings Bank Deposits, Trust and Other Funds.	Annual Interest on Savings Bank Deposits and Other Funds.	Total Interest-Bearing Debt.[1]	Annual Interest Charge.	Average Rate of Interest.
	$	$	p.c.	$	$	$	$	p.c.
1913...	260,869,037	8,973,746	3·439	91,735,123	2,904,287	352,604,160	11,878,033	3·368
1914...	311,833,272	11,162,047	3·579	93,031,928	2,957,544	404,865,200	14,119,591	3·487
1915...	358,659,932	13,075,447	3·645	91,910,510	2,935,881	450,570,442	16,011,328	3·554
1916...	508,000,366	20,499,696	4·035	92,240,955	2,960,002	600,241,321	23,459,698	3·908
1917...	893,208,877	39,098,579	4·376	96,885,192	3,114,315	990,094,069	42,212,894	4·263
1918...	1,472,098,608	71,121,368	4·831	95,796,899	3,096,532	1,567,895,507	74,217,900	4·733
1919...	2,035,218,097	102,218,489	5·022	100,636,102	3,441,803	2,135,854,199	105,660,292	4·947
1920...	2,596,816,821	134,559,302	5·181	107,038,317	4,275,480	2,703,855,138	138,834,782	5·134
1921...	2,520,997,021	130,416,007	5·173	107,345,348	4,429,302	2,628,342,369	134,845,309	5·130
1922...	2,564,587,671	133,482,113	5·204	105,379,439	4,399,661	2,669,967,110	137,881,774	5·164
1923...	2,547,105,821	131,476,511	5·161	106,763,391	4,531,156	2,653,869,212	136,007,667	5·125
1924...	2,504,033,820	128,571,337	5·134	110,113,766	4,626,715	2,614,147,586	133,198,052	5·092
1925...	2,503,763,169	125,928,071	5·029	113,943,282	4,758,780	2,617,706,451	130,686,851	4·992
1926...	2,484,410,336	125,108,738	5·035	119,205,393	4,977,889	2,603,615,729	130,086,627	4·996
1927...	2,439,340,736	123,399,911	5·058	126,310,527	5,274,429	2,565,651,263	128,674,340	5·015
1928...	2,377,581,086	119,479,400	5·025	136,485,482	5,721,330	2,514,066,568	125,200,730	4·980
1929...	2,325,413,986	116,843,934	5·024	145,780,369	6,156,036	2,471,194,355	122,999,970	4·977
1930...	2,250,837,286	112,942,215	5·017	154,997,435	6,572,018	2,405,834,721	119,514,233	4·967
1931...	2,320,832,286	115,491,955	4·976	163,994,443	6,969,151	2,484,826,729	122,461,106	4·928
1932...	2,579,238,724	128,188,969	4·970	136,356,977	5,522,579	2,715,595,701	133,711,548	4·923
1933...	2,715,977,874	132,866,543	4·892	144,176,675	5,858,850	2,860,154,549	138,725,393	4·850
1934...	2,858,624,524	132,354,806	4·630	154,137,868	6,093,937	3,012,762,392	138,448,743	4·595
1935...	3,061,955,821	127,074,870	4·150	171,554,957	6,683,560	3,233,510,778	133,758,430	4·136
1936...	3,265,314,332	128,598,908[2]	3·938	196,197,897[2]	7,679,285	3,461,512,729	136,278,193	3·937
1937...	3,337,358,832	125,093,381	3·748	224,157,683	8,798,557	3,561,516,514	133,891,938	3·759
1938...	3,314,558,032	117,062,907	3·532	248,176,039	9,771,812	3,562,734,071	126,834,719	3·560

[1] The total of interest-bearing debt, as here given, includes bonds purchased and held by the Treasury for sinking funds. [2] In 1936 an amount of $11,827, being compensation to seigneurs, previously included under Savings Bank Deposits, Trust and Other Funds, was transferred to Bonds, Debentures, and Treasury Bills.

Guaranteed Debt of the Dominion.—Besides the direct debt of the Dominion, already dealt with, there are also large indirect obligations, arising mainly out of the guarantee of securities, by the Dominion, of the railway lines which now form the Canadian National Railways, and the subsequent extensions thereof. Together with these are other smaller indirect obligations, originating in the Government's guarantees of the bonds of the Canadian National Steamship services and of the bonds of its Harbour Commissions, issued in the main for harbour improvements. Since 1932 guarantees of certain bank loans have been made under the various Relief Acts. With the commencement of business of the Bank of Canada on Mar. 11, 1935, the guarantee, authorized by Sec. 27 (6) of the Bank of Canada Act, of the deposit required to be maintained in the Bank of Canada by every chartered bank, came into force. This guarantee will require to be implemented "in the event of the property and assets of the Bank being insufficient to pay its liabilities, and if the Bank suspends payment of any of its liabilities". Under the terms of the Home Improvement Loans Guarantee Act, 1937, the Government guarantees chartered banks and other approved lending institutions against losses up to 15 p.c. of the aggregate value of loans made by each such institution for the financing of repairs, alterations, and improvements to rural and urban dwellings. The Act provides that the amount of guarantees shall not exceed $50,000,000 and therefore the limit of the Government's guarantee is $7,500,000. Under the terms of the Saskatchewan Seed Grain Loans Guarantee Act, 1936, the Dominion Government guarantees the principal and interest of loans made in Saskatchewan by chartered banks for seed grain assistance to farmers during the spring of 1936. These loans are primarily guaranteed by the province of Saskatchewan and the Dominion's liability is only to the amount that the province is unable to fulfil its guarantee. The amount of this guarantee is $2,555,113.

Under the terms of the Seed Grain Loans Guarantee Act, 1937, the Dominion Government guarantees the principal and interest of loans made in Alberta, Manitoba, and Saskatchewan during the spring of 1937. The loans in each province are primarily guaranteed by the Provincial Government and the Dominion's liability is only to the amount of the guarantee that the province is unable to meet. Such guarantees for Alberta and Manitoba are not to exceed $1,042,692 and for Saskatchewan the amount was expected to reach about $6,400,000.

Under the Act of 1938, such guarantees during the spring of 1938 are extended only to Alberta and Saskatchewan and the liability of the Dominion Government is not to exceed $1,900,000 for Alberta and $14,500,000 for Saskatchewan.

Statistics showing the growth of these indirect obligations since 1914 are given in Table **28**, while Table **29** shows the obligations as they existed on Mar. 31, 1938.

28.—Securities Guaranteed by the Dominion Government (Amounts Held by the Public), as at Mar. 31, 1914-38.

NOTE.—Dashes in this table indicate that there were no guarantees of the type shown for the corresponding years.

Fiscal Year.	Railways, Guaranteed as to Principal and Interest.	Railways, Guaranteed as to Interest only.	Canadian National Steamships.	Harbour Commissions.	Other Guarantees.	Bank of Canada.	Total.
	$	$	$	$	$	$	$
1914	94,738,584	–	–	–	–	–	94,738,584
1915	114,644,310	–	–	–	–	–	114,644,310
1916	135,546,098	–	–	–	–	–	135,546,098
1917	135,546,098	–	–	–	–	–	135,546,098
1918	135,546,098	–	–	–	–	–	135,546,098
1919	130,436,098	–	–	–	–	–	130,436,098
1920	130,436,098	–	–	–	–	–	130,436,098
1921	197,545,125	–	–	–	–	–	197,545,125
1922	248,987,789	–	–	–	–	–	248,987,789
1923	237,878,762	216,207,142[1]	–	–	–	–	454,085,904
1924	309,628,762	216,207,142	–	–	–	–	525,835,904
1925	365,915,762	216,207,142	–	–	–	–	582,122,904
1926	364,415,762	216,207,142	–	–	–	–	580,622,904
1927	397,795,002	216,207,142	–	4,000,000[1]	–	–	618,002,144
1928	440,224,186	216,207,142	828,789[1]	9,467,165	–	–	666,727,282
1929	472,709,509	216,207,142	7,936,486	17,355,118	–	–	714,208,255
1930	590,091,292	216,207,142	9,400,000	21,335,118	–	–	837,033,552
1931	707,474,852	216,207,142	9,400,000	21,835,118	–	–	954,917,112
1932	753,080,146	216,207,142	9,400,000	21,835,118	–	–	1,000,522,406[2]
1933	748,874,239	216,207,142	9,400,000	21,670,472	28,272,301[1,2]	–	1,024,424,154[2]
1934	746,035,434	216,207,142	9,400,000	21,634,472	93,296,073[2]	–	1,086,573,121[2]
1935	740,117,976	216,207,142	9,400,000	21,601,481	104,525,860	149,028,902[1]	1,240,881,361
1936	747,366,632	216,207,142	9,400,000	21,576,481	96,044,370	188,202,917	1,278,797,542
1937	756,163,072	216,207,142	9,400,000	21,565,595	14,836,167	194,275,314	1,212,447,290
1938	803,740,048	216,207,142	9,400,000	21,260,595	18,399,635[3]	194,859,595	1,263,867,015

---

[1] First year data recorded. [2] Unstated advances *re* wheat marketing are not included.
[3] Does not include indeterminate amounts and amounts not yet determined.

29.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1938.

Security.	Amount of Guarantee Authorized.	Amount Outstanding and Held by the Public.	Where Payable.
	$	$	
Railway Securities Guaranteed as to Principal and Interest—			
Canadian Northern Rly. Co., 3 p.c. deb. stock, due 1953, £1,923,287-0-0	9,359,997	9,359,997	London.
Canadian Northern Rly. Co., 3½ p.c. deb. stock, due 1958, £1,622,586-19-9	7,896,590	7,896,543	[1]
Canadian Northern Ontario Rly. Co., 3½ p.c. deb. stock, due 1961, £7,350,000-0-0	35,770,000	34,229,997	London.
Canadian Northern Alberta Rly. Co., 3½ p.c. deb. stock, due 1960, £647,260-5-6	3,150,000	3,149,999	London.
Grand Trunk Pacific Rly. Co., 3 p.c. bonds, due 1962, £14,000,000-0-0	68,040,000	34,992,000	London, New York, and Canada.
Canadian Northern Alberta Rly. Co., 3½ p.c. deb. stock, due 1962, £733,561-12-10	3,570,000	–	London and Canada.
Grand Trunk Pacific Rly. Co., 4 p.c. bonds, due 1962, £3,280,000-0-0	15,940,800	8,440,848	London, New York, and Canada.
Canadian Northern Rly. Co., 6½ p.c. bonds, due 1946	25,000,000	24,238,000	New York.
Canadian National Rly. Co., 5 p.c. serial equipment bonds, 1923-38	22,500,000	750,000	Canada.
Canadian National Rly. Co., 5 p.c. bonds, due 1954	50,000,000	50,000,000	Canada.
Canadian National Rly. Co., 1927, 2 p.c. guar. deb. stock, £7,176,801-0-0	34,927,098	23,282,664	London.
Canadian National Rly. Co., 4½ p.c. gold bonds, due 1957	65,000,000	65,000,000	New York and Canada.
Canadian National Rly. Co., 5 p.c. gold bonds, due July 1, 1969	60,000,000	60,000,000	London, New York, and Canada.
Canadian National Rly. Co., 5 p.c. gold bonds, due Oct. 1, 1969	60,000,000	60,000,000	London, New York, and Canada.
Canadian National Rly. Co., 5 p.c. gold bonds, due 1970	18,000,000	18,000,000	London, New York, and Canada.
Canadian National Rly. Co., 4¾ p.c. gold bonds, due 1955	50,000,000	50,000,000	London, New York, and Canada.
Canadian National Rly. Co., 4½ p.c. gold bonds, due 1956	70,000,000	70,000,000	London, New York, and Canada.
Canadian National Rly. Co., 4½ p.c. gold bonds, due 1951	50,000,000	50,000,000	London, New York, and Canada.
Canadian National Rly. Co., 3 p.c. bonds, due 1950	20,500,000	20,500,000	Canada.
Canadian National Rly. Co., 2 p.c. bonds, due 1938	13,400,000	13,400,000	Canada.
Canadian National Rly. Co., 3 p.c. bonds, due 1944	35,000,000	35,000,000	Canada.
Canadian National Rly. Co., 2 p.c. bonds, due 1943	55,000,000	55,000,000	Canada.
Canadian National Rly. Co., 3 p.c. bonds, due 1953	25,000,000	25,000,000	Canada.
Canadian National Rly. Co., 2¼ p.c. bonds, due 1944	15,500,000	15,500,000	Canada.
Canadian National Rly. Co., 3 p.c. bonds, due 1952	20,000,000	20,000,000	Canada.
Canadian National Rly. Co., 2 p.c. bonds, due 1942	20,000,000	20,000,000	Canada.
Canadian National Rly. Co., 3 p.c. bonds, due 1950	30,000,000	30,000,000	Canada.
Totals	**883,554,485**	**803,740,048**[2]	

---

[1] Part of this issue is payable in Canada, part in London, and the balance in London and Canada.

[2] Additional railway securities guaranteed as to principal and interest to the value of $45,657,952 were held by the Canadian National Securities Trust as at Mar. 31, 1938, but these are not outstanding in the same sense as those in the hands of the public.

29.—Securities Guaranteed by the Dominion Government, as at Mar. 31, 1938—concluded.

Security.	Amount of Guarantee Authorized.	Amount Outstanding and Held by the Public.	Where Payable.
	$	$	
Railway Securities Guaranteed as to Interest Only—			
Grand Trunk Rly., Acquisition Guarantees—			
Grand Trunk 4 p.c. perp. guar. stock, £12,500,000	60,833,333	60,833,333	London.
Grand Trunk 5 p.c. perp. deb. stock, £4,270,375.	20,782,492	20,782,492	London.
Great Western 5 p.c. perp. deb. stock, £2,723,080.	13,252,323	13,252,323	London.
Grand Trunk 4 p.c. perp. deb. stock, £24,624,455.	119,839,014	119,839,014	London.
Northern Rly. of Canada, 4 p.c. perp. deb. stock, £308,215	1,499,980	1,499,980	London.
Totals	**216,207,142**	**216,207,142**	
Other Securities Guaranteed as to Principal and Interest—			
Harbour Commissioners of Montreal, Montreal South Shore Bridge 5 p.c. bonds due 1969	19,500,000	19,000,000	London, New York, and Canada.
Canadian National (West Indies) Steamships Ltd., 5 p.c. bonds, due 1955	10,000,000	9,400,000	London, New York, and Canada.
Saint John Harbour Commission—			
(*a*) Bonded indebtedness of the city of Saint John, assumed by the Commission	1,467,165	892,642	$219,000 payable in London, New York, and Canada; balance in Canada.
(*b*) Debentures of the Commission issued to the city of Saint John, due 1952	667,953	667,953	Canada.
New Westminster Harbour Commissioners 4¾ p.c. debentures, due 1948	700,000	700,000	New York and Canada.
Totals	**32,335,118**	**30,660,595**	
Other Guarantees—			
Bank advances, *re* Province of Manitoba Savings Office	12,442,400	6,875,932	Canada.
Bank advances, *re* Government of Newfoundland	625,000	625,000	Canada.
Bank advances, *re* Dominion Steel and Coal Corporation (order for steel rails)	1,100,000	9,724	Canada.
Province of British Columbia treasury bills	626,534	626,534	Canada.
Province of Manitoba treasury bills	5,894,127	4,878,764	Canada.
Loans made by approved lending institutions under Dominion Housing Act, 1935	Unstated.	Indeterminate.	Canada.
Loans made by approved lending institutions under the Home Improvement Loans Guarantee Act	7,500,000	2,176,391	Canada.
Bank advances, *re* Grain Marketing—			
Canadian Co-operative Wheat Producers, Ltd. (Saskatchewan Oats Acct.)	-	168,909	Canada.
The Canadian Wheat Board	5,000,000	483,269	Canada.
Winnipeg Grain and Produce Clearing Association Ltd. Day-to-day margins of the Canadian Wheat Board (closed out daily)	Unstated.	-	Canada.
Bank loans guaranteed under the Saskatchewan Seed Grain Loans Guarantee Act, 1936	4,000,000	2,555,113	Canada.
Bank loans guaranteed under the Seed Grain Loans Guarantee Act, 1937	8,950,000	Not determined.	Canada.
Bank of Canada—			
Deposits maintained by the chartered banks in Bank of Canada	Unstated.	194,859,595	Canada.

Section 2.—Provincial Public Finance.*

Provincial Governments in Canada are in the position, under Sec. 118 of the British North America Act, 1867 (30 and 31 Vict., c. 3), and the British North America Act, 1907 (7 Edw. VII, c. 11), of having a considerable assured income in subsidies from the Dominion Treasury. Details of these payments are given for recent years at pp. 894-897 of this chapter. In addition, through their retention of ownership of their lands, minerals, and other natural resources, those provinces that, by the voluntary action of their previously existing governments, entered Confederation, raise considerable revenues through land sales, sales of timber, mining royalties, leases of water powers, etc., while the Prairie Provinces, though having controlled their own natural resources since 1930, formerly received from the Dominion special grants in lieu of land revenues. Further, under Sec. 92 of the British North America Act, provincial legislatures are given authority to impose direct taxation within the province for provincial purposes and to borrow money on the sole credit of the province. The total revenues received by Provincial Governments for their fiscal years ended 1937 are analysed by source in Table **32.**

Prior to the opening of the present century, provincial receipts and expenditures were generally moderate, as may be seen, both for individual provinces and for the provinces collectively, from Tables **30** and **31.** The demand, more especially in Ontario and the West, for increased services from governments, particularly in respect of education, sanitation, and public ownership and operation of public utilities, and the performance of these functions, necessitated increased revenues, which had in the main to be raised by taxation. Among the chief methods of taxation to be employed has been the taxation of corporations and estates, succession duties showing a considerably increased yield even within the comparatively short period of twenty-one years from 1916 to 1937 covered by the statements compiled by the Finance Branch of the Bureau of Statistics.† The fact that provincial government is cheaper per head in the eastern provinces (although both Ontario and Nova Scotia have shown large per capita increases in recent years) is evident from Table **31**, which gives the per capita ordinary revenues and expenditures for various fiscal years, from 1871 to 1937. This, however, is not to be taken as evidence that the larger services rendered to the public are not worth what is being paid for them.

For the half-century subsequent to Confederation, the provincial accounts, published by each Government according to its own system of accounting, were quite incomparable as among the provinces, a fact much regetted by students of provincial public finance. Upon the creation of the Dominion Bureau of Statistics in 1918, its Finance Branch undertook the work of placing the various provincial public accounts on a comparable basis, correlating, for example, the revenue derived from succession duties, taxation of corporations, sales of public lands, royalties on forest, mineral, and fisheries products, as well as the expenditures on such services as agriculture, civil government, education, and public works. As the result of the

---

* Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues detailed statements on Provincial Finance which may be obtained from the Dominion Statistician. For a list of these publications, see Section 1 of Chapter XXIX.

† The succession duties collected by the provinces in 1937 amounted in the aggregate to $26,620,946, as compared with $1,020,972 as recently as 1904, or an increase of more than 26-fold in 33 years. The aggregate revenue raised by taxation of corporations, land, income, and miscellaneous (exclusive of gasoline taxes, succession duties, and amusement taxes), increased from $7,217,548 in 1916 to $52,128,602 in 1937, an increase of 622 p.c. in 21 years.

Bureau's exhaustive analysis of the provincial public accounts, a summary statement of the ordinary receipts and expenditures of the Provincial Governments appears for the first time in the 1919 Year Book. The various items of receipts and expenditures were classified under appropriate headings and a uniform terminology was adopted. From these statements it is possible to ascertain the amounts received and expended in each year under the respective headings for each province, as well as for the provinces collectively. The detailed figures for the years 1916 to 1920 will be found on pp. 680-685 of the 1921 Year Book, those for 1921 on pp. 786-791 of the 1922-23 Year Book and those for 1922 to 1926 on pp. 836-841 of the 1927-28 Year Book.

The Bureau now makes more extensive analyses of the finances of the provinces, including capital and trust accounts as well as ordinary revenue and expenditure. These analyses are based on a uniform classification adopted at a conference held in 1933 between provincial treasury officials and the Dominion Bureau of Statistics. This new extended analysis, however, does not affect the comparability of the summary totals of Table **30**.

Data for 1937 are given on the new uniform basis in Tables **32** and **33**.

Subsection 1.—Provincial Revenues and Expenditures.

Ordinary Revenues and Expenditures.—The total ordinary revenues and expenditures of the provinces for their individual fiscal years are shown in Table **30**, for the census years 1871-1926 and for each year from 1931-37. While revenues have grown very rapidly over the period covered, expenditures have more than kept pace. Tables **32** and **33** show detailed ordinary revenues and expenditures for 1937.

Some explanation is perhaps necessary in regard to the Capital Receipts and Expenditures and the Trust and Public Charities Funds Receipts and Expenditures shown in the lower parts of these latter tables. In regard to the former, receipts represent the proceeds of loans and borrowings in the form of bonds, debentures, and treasury bills and are largely offset by capital payments for debt retirements; there are, however, receipts from the Dominion Government in regard to old age pensions and unemployment relief which are regarded as capital receipts. Finally, refunds of capital expenditures, made earlier in the form of advances or loans, are also included under this heading.

With regard to the Trust and Public Charities Funds accounts, these, as will be noted, relate chiefly to the province of Quebec where, under the Public Charities Act, parts of the revenues derived from Liquor Commission profits, taxes on amusements and race tracks, and the hospital tax on meals are transferred to the Public Charities Fund for the benefit of hospitals, sanatoria, refuges, and other charitable institutions. In New Brunswick, Quebec, and Manitoba there are also judicial deposits in connection with appeals, sales by the sheriff, etc., which are made to the Trust Funds accounts. Since 1916, *i.e.*, in the short space of 21 years, while total revenues of all provinces have shown an increase of 437 p.c., ordinary expenditures have increased 371 p.c.

The Growth of Provincial Taxation.—Whereas in earlier years the Dominion subsidies, together with the revenues arising out of the natural resources of the provinces and from fees for specific services rendered to the citizens, nearly sufficed to cover the whole expenses of government and rendered a resort to taxation for provincial purposes practically unnecessary in most of the provinces, the great increase in the functions of government since the commencement of the present century has put an end to this state of affairs. The aggregate amount of taxation for provincial purposes in the fiscal years prior to 1916 is unfortunately not available. Since that time provincial taxation has increased from $12,521,816 in 1916 to $117,694,985 in 1937 (exclusive of motor vehicle licences, liquor traffic profits, and other licences and permits, etc.), or over nine-fold in 21 years, according to the recently amended classification made in the Dominion Bureau of Statistics.

The increase in the use of automobiles, both for commercial purposes and pleasure, is clearly demonstrated by the growing revenues from licences and permits issued by the Provincial Governments. In 1921 the total revenue of all provinces from automobile licensing alone amounted to $7,857,751. It has since fluctuated considerably, reaching $21,735,827 in 1929 but declining to $19,952,575 in 1931. The revenue from this source in 1937 was $26,053,580.

The gasoline tax is now generally adopted as a means of increasing provincial receipts and has proved to be a lucrative source of revenue. In 1923 only Manitoba and Alberta showed gasoline-tax revenue, the total being $280,404. In 1924 the five provinces of Prince Edward Island, Quebec, Manitoba, Alberta, and British Columbia collected such revenue to the amount of $559,543, while in 1925 the same provinces, with Ontario added, collected $3,521,388. In 1926 all provinces, except Saskatchewan, collected gasoline taxes to the amount of $6,104,716, in 1927 to $7,615,907, and in 1928 to $9,151,735; thereafter, gasoline taxes were collected in all provinces and amounted to $17,237,017 in 1929, $20,956,590 in 1930, $23,859,067 in 1931, $24,987,273 in 1932, $25,931,480 in 1933, $26,812,275 in 1934, $20,474,977* in 1935, $32,310,353 in 1936, and in 1937 to $35,415,061. The higher yields in recent years, however, were due partly to higher rates of taxation. The general rates of taxation at present (1939) in force are 10c. in the Maritime Provinces, 8c. in Quebec and Ontario, and 7c. in the Western Provinces; certain exemptions are allowed in each province.

The provincial revenues from the liquor traffic increased considerably between 1925 and 1930, but subsequently declined until 1934, again increasing in 1937. The adoption of government control of the sale of liquor in one province after another, until now it exists in all but Prince Edward Island where prohibition is still in force, has resulted in trading profits, licensing revenues, and permit fees, all of which have swelled the provincial revenues. Prior to the adoption of government control, such revenues were not available to the provinces. In 1925 the total revenue collected by all provinces from the liquor traffic was $8,964,824; in 1926 it was $11,609,392, increasing to $27,599,687 by 1929. In 1933 such revenue amounted to $16,160,980, in 1934 to $12,814,120, in 1935 to $12,886,197, in 1936 to $19,338,366, and to $25,913,699 in 1937. The method of control varies somewhat as between the provinces. In the majority of cases there are independent commissions or boards to administer the provincial liquor traffic Acts, but the accounting and trading profits are shown somewhat differently in the various provincial public accounts reports.†

Fiscal Years of the Provinces.—The fiscal years of the provinces are as follows: P.E.I., Dec. 31; N.S., Sept. 30 prior to 1935 and Nov. 30 thereafter; N.B., Oct. 31; Que., June 30; Ont., Oct. 31 prior to 1935 and Mar. 31 thereafter; Man. and Sask., Apr. 30; Alta. and B.C., Mar. 31.

---

* The wide difference between the figure for 1935 and the one for 1936 is accounted for largely by the change in the fiscal year for the province of Ontario from Oct. 31 to Mar. 31, so that the Ontario figures for 1935 included in the 1935 total were for five months only.

† See Chapter XVII, pp. 622–625, and also the report of the Dominion Bureau of Statistics on "The Control and Sale of Liquor in Canada".

30.—Ordinary Revenues and Expenditures of the Provincial Governments for their respective fiscal years ended in the census years 1871-1926 and in each year from 1931-37.

NOTE.—For provincial ordinary revenues and expenditures in all other provincial fiscal years since Confederation, see 1932 Year Book, pp. 734-736. Figures for intervening years between 1916 and 1931 are given at p. 875 of the 1938 Year Book.

Fiscal Year.	Prince Edward Island.		Nova Scotia.		New Brunswick.		Quebec.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	$	$	$	$	$	$	$	$
1871	385,014	406,236[1]	525,824	600,344	451,076	438,407	1,632,032	1,575,545
1881	275,380	261,276[1]	476,445	494,582	607,445	598,844	3,191,779	3,566,612
1891	274,047	304,486[1]	661,541	692,538	612,762	680,813	3,457,144	4,095,520
1901	309,445	315,326	1,090,230	1,088,927	1,031,267	910,346	4,563,432	4,516,554
1906	258,235[2]	264,135[1,2]	1,391,629	1,375,588	887,202	879,066	5,340,167	5,179,817
1911	374,798	398,490[1]	1,625,653	1,790,778	1,347,077	1,403,547	7,032,745	6,424,900
1916	508,455	453,151[1]	2,165,338	2,152,773	1,580,419	1,568,340	9,647,984	9,436,687
1921	769,719	694,042[1]	4,586,840	4,678,146	2,892,905	3,432,512	15,914,521	14,624,088
1926	832,551	756,114[1]	5,744,575	6,327,043	4,206,853	4,078,775	27,206,335	26,401,480
1931	1,149,570	1,453,191[1]	8,104,602	8,194,592	5,980,914	6,761,420	41,630,620	40,854,245
1932	1,206,026	1,277,401[1]	8,874,095	9,037,199	6,495,573	6,898,263	39,349,193	39,933,901
1933	1,263,063	1,392,275[1]	8,013,463	9,632,347	5,691,138	5,770,207	33,324,760	40,165,668
1934	1,385,777	1,656,924[1]	8,876,505	10,168,838	5,809,975	6,434,035	31,018,342	36,612,816
1935	1,535,709	1,912,006[1]	13,642,410[3]	14,540,011[3]	6,486,481	7,189,598	35,195,579	40,134,814
1936	1,718,466	1,743,120[1]	12,841,266	12,689,548	7,330,142	7,755,111	40,497,031	42,420,207
1937	1,830,260	1,951,034[1]	14,101,342	14,038,953	9,630,144	9,601,052	47,924,840	43,956,275

Fiscal Year.	Ontario.		Manitoba.		Saskatchewan.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	$	$	$	$	$	$
1871	2,333,180	1,816,784	–	–	–	–
1881	2,788,747	2,592,800	121,867	226,808	–	–
1891	4,138,589	4,158,460	590,484	664,432	–	–
1901	4,466,044	4,038,834	1,008,653	988,251	–	–
1906	7,149,478	6,720,179	2,089,652	1,572,691	1,441,258[3]	1,364,352[3]
1911	9,370,834	9,916,934	4,454,190	4,002,826	2,699,603	2,575,145
1916	13,841,339	12,706,333	5,897,807	6,147,780	4,801,064	5,258,756
1921	30,411,396[4]	28,579,688	9,358,956	10,063,139	11,789,920	12,151,665
1926	52,039,855[4]	51,251,781	10,582,537	10,431,652	13,317,398	13,212,483
1931	54,390,092[5]	54,846,994[5]	13,842,511	14,491,673	14,346,010	18,202,677
1932	68,999,855[6]	71,060,654[6]	15,726,641	15,726,641	13,254,871	19,075,161
1933	67,800,543	67,324,117	13,838,339	15,782,904	16,177,784	16,756,421
1934	61,426,934	103,578,686	13,966,921	14,003,533	15,585,918	16,979,911
1935	30,941,953[7]	41,382,625[7]	16,092,546	15,933,111	15,278,905	18,115,533
1936	90,321,896	103,664,602	16,415,993	16,294,294	17,838,692	18,890,607
1937	107,088,435	97,774,496	17,214,854	16,934,472	18,388,857	19,635,392

Fiscal Year.	Alberta.		British Columbia.		Totals for All Provinces.	
	Revenue.	Expenditure.	Revenue.	Expenditure.	Revenue.	Expenditure.
	$	$	$	$	$	$
1871	–	–	191,820[8]	97,692[8]	5,518,946[9]	4,935,008[9]
1881	–	–	397,035	378,779	7,858,698[9]	8,119,701[9]
1891	–	–	959,248	1,032,104	10,693,815[9]	11,628,353[9]
1901	–	–	1,605,920	2,287,821	14,074,991	14,146,059
1906	1,425,059[2]	1,485,914[2]	3,044,442	2,328,126	23,027,122[9]	21,169,868[9]
1911	3,309,156[10]	3,437,088[10]	10,492,892	8,194,803	40,706,948[9]	38,144,511[9]
1916	5,281,695	6,018,894	6,291,694	10,083,505	50,015,795[9]	53,826,219[9]
1921	11,086,937	13,109,304	15,219,264	15,236,931	102,030,458[9]	102,569,515[9]
1926	11,912,128	11,894,328	20,608,672	19,829,522[11]	146,450,904[9]	144,183,178[9]
1931	15,710,962	18,017,544	23,988,199	27,931,866[11]	179,143,480[9]	190,754,202[9]
1932	13,492,430	18,645,481	25,682,892	32,734,453	193,081,576[9]	214,389,154[9]
1933	15,426,265	17,533,786	23,333,115	26,169,492	184,868,470[9]	200,527,219[9]
1934	15,178,607	17,056,639	22,618,367	22,992,344	175,867,349[9]	229,483,726[9]
1935	15,790,170	17,528,221	25,603,942	24,439,767	160,567,695[9]	181,175,686[9]
1936	16,636,652	18,287,450	29,016,044	26,396,869	232,616,182[9]	248,141,808[9]
1937	20,743,046	20,665,193	31,575,892	28,886,870	268,497,670[9]	253,443,737[9]

---

[1] Expenditure on capital account not separable and included. [2] Nine months. [3] Fourteen months. [4] Includes capital revenue for lands, which cannot be separated. [5] Exclusive of interest paid by Hydro and other commissions. [6] Taken from the Public Accounts of Ontario. [7] Five months. [8] Six months. [9] See footnotes to figures for individual provinces. [10] Includes small sums of capital revenue or expenditure which cannot be separated. [11] Includes sinking funds taken from capital expenditure (expenditure out of income).

31.—Ordinary Revenues and Expenditures of Provincial Governments per Head of Population for their respective fiscal years ended in the census years 1871-1926 and in each year from 1931-37.

NOTE.—Per capita figures are calculated on the basis of the population figures given on p. 113. See also headnote to Table 30.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Average for All Provinces.
	$	$	$	$	$	$	$	$	$	$
	ORDINARY REVENUES.									
1871	4·10	1·36	1·58	1·37	1·44	-	-	-	5·31[1]	1·50[2]
1881	2·53	1·10	1·90	2·35	1·45	1·97	-	-	8·10	1·82
1891	2·51	1·49	1·91	2·32	1·96	3·86	-	-	9·79	2·21
1901	3·00	2·37	3·12	2·77	2·05	3·96	-	-	8·97	2·62
1906	2·69[3]	2·99	2·66	2·99	3·11	5·71	5·59[4]	7·70[3]	10·91	3·80[2]
1911	3·99	3·30	3·83	3·51	3·71	9·66	5·49	8·85[5]	26·70	5·65[2]
1916	5·53	4·29	4·29	4·48	5·10	10·65	7·41	10·65	13·80	6·25
1921	8·65	8·75	7·46	6·74	10·37[6]	15·34	15·57	18·85	28·99	11·61[2]
1926	9·57	11·15	10·62	10·45	16·45[6]	16·56	16·22	19·59	34·01	15·50[2]
1931	13·06	15·80	14·66	14·48	15·85[7]	19·77	15·56	21·46	34·56	17·27[2]
1932	13·55	17·10	15·73	13·52	19·86[8]	22·18	14·21	18·23	36·48	18·13[2]
1933	14·19	15·35	13·55	11·22	19·02	19·49	17·36	20·62	32·77	17·31
1934	15·57	16·91	13·67	10·28	16·93	19·64	16·72	20·08	31·20	16·22
1935	17·26	25·89[4]	15·12	11·49	8·42[9]	22·63	16·41	20·67	34·84	14·68[2]
1936	18·68	23·91	16·85	13·08	24·48	23·09	19·16	21·55	38·69	21·09
1937	19·68	26·02	21·89	15·29	28·86	24·01	19·58	26·66	42·05	24·15
	ORDINARY EXPENDITURES.									
1871	4·32[10]	1·55	1·53	1·32	1·12	-	-	-	2·69[1]	1·34[2]
1881	2·40[10]	1·12	1·87	4·47	1·35	3·66	-	-	7·71	1·89[2]
1891	2·79[10]	1·54	2·12	2·75	1·97	4·34	-	-	10·53	2·41[2]
1901	3·06	2·37	2·75	2·74	1·85	3·88	-	-	12·78	2·63
1906	2·75[3,10]	2·96	2·63	2·90	2·92	4·30	5·29[4]	8·03[3]	8·34	3·49[2]
1911	4·24[10]	3·64	3·99	3·20	3·92	8·68	5·23	9·19[5]	20·85	5·29[2]
1916	4·93[10]	4·26	4·26	4·38	4·68	11·10	8·12	12·13	22·11	6·73[2]
1921	7·80[10]	8·93	8·85	6·19	9·74	16·50	16·05	22·29	29·02	11·67[2]
1926	8·69[10]	12·29	10·30	10·14	16·20	16·32	16·09	19·56	32·72[11]	15·26[2]
1931	16·51[10]	15·97	16·57	14·22	15·98[7]	20·70	19·74	24·61	40·25[11]	18·38[2]
1932	14·35[10]	17·41	16·70	13·72	20·45[8]	22·18	20·44	25·20	46·50	19·77[2]
1933	15·64[10]	18·45	13·74	13·52	18·89	22·23	17·98	23·44	36·75	18·77[2]
1934	18·62[10]	19·37	15·14	12·13	28·54	19·70	18·22	22·56	31·71	20·11[2]
1935	21·48[10]	27·59[4]	16·76	13·11	11·27[9]	22·41	19·46	22·94	33·25	16·57[2]
1936	18·95[10]	23·63	17·83	13·70	28·09	22·92	20·29	23·69	35·20	22·50[2]
1937	20·98[10]	25·90	21·82	14·02	26·35	23·62	20·91	26·56	38·46	22·79[2]

---

[1] Six months. [2] See footnotes to figures for individual provinces. [3] Nine months. [4] Fourteen months. [5] Includes small sums of capital revenue or expenditure which cannot be separated. [6] Includes capital revenue for lands, which cannot be separated. [7] Exclusive of interest paid by Hydro and other commissions. [8] Taken from Public Accounts of Ontario. [9] Five months. [10] Expenditure on capital account not separable and included. [11] Includes sinking funds taken from capital expenditure (expenditure out of income).

32.—Ordinary, Capital, and Trust and Charity Revenues of

(AMENDED UNIFORM

NOTE.—For information as to when the fiscal years

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Ordinary Revenues—					
Dominion Government (subsidies included)	836,519	4,158,966	2,883,225	2,748,150	13,025,504
Taxation	741,251	4,386,180	2,578,342	22,769,567	51,971,573
Royalties, duties, and dues	3,186	707,155	814,219	5,195,231	2,315,919
Licences and permits	147,350	1,418,655	1,245,598	7,542,830	11,863,192
Fees	19,879	305,061	126,334	1,379,046	2,615,288
Liquor traffic control	55,000	1,441,600	1,104,717	4,622,192	10,000,000
Fines and penalties	2,327	28,682	18,185	229,121	236,587
Profits from trading activities	3,000	52,757	31,214	Nil	28,246
Interest, premium, and exchange	Nil	902,851	437,601	1,461,126	10,627,384
Refunds of expenditure	972	Nil	8,237	638,420	539,529
Agriculture and public domain	1,845	48,822	71,450	1,230,626	666,340
Institutional revenue	10,084	584,404	291,869	[1]	2,018,974
Other	8,847	66,209	19,153	108,531	1,179,899
Totals, Ordinary Revenues	**1,830,260**	**14,101,342**	**9,630,144**	**47,924,840**	**107,088,435**
Capital Receipts—					
Proceeds of loans and borrowings	500,000	13,134,225	12,333,459	50,373,000	94,113,090
Sinking funds and investments (earnings, sale of, etc.)	279,851	548,966	149,500	Nil	2,022,957
Provincial Savings Office	Nil	Nil	Nil	"	15,721,279
Dominion Government	155,932	407,033	663,351	12,387,476	15,471,695
Sale of property or other capital assets	Nil	Nil	Nil	Nil	12,770
Refunds of expenditure or repayment of advances or loans	10,150	330,451	53,624	242,906	34,037,885
Agriculture and public domain	Nil	Nil	Nil	Nil	153,068
Other	"	5,050	72,208	"	453,520
Totals, Capital Receipts	**945,933**	**14,425,725**	**13,272,142**	**63,003,382**	**161,986,264**
Trust and Public Charities Funds Receipts—					
Marriage licences	Nil	Nil	Nil	12,444	Nil
Public charities fund	"	"	"	5,001,790	"
Deposits, guarantees, etc	"	"	27,520	5,485,765	"
Other	"	"	57,174	234,195	"
Totals, Trust and Public Charities Funds Receipts	**Nil**	**Nil**	**84,694**	**10,734,194**	**Nil**

[1] Included in Trust and Public Charities Funds Receipts.

Provincial Governments for their respective fiscal years ended in 1937.

CLASSIFICATION.)

of the various provinces end, see text at foot of p. 909.

Item.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	$	$	$	$	$
Ordinary Revenues—					
Dominion Government (subsidies included)	3,931,707	4,688,142	5,092,080	3,462,974	40,827,267
Taxation	7,572,279	5,690,202	7,381,582	14,604,009	117,694,985
Royalties, duties, and dues	174,672	295,665	673,147	2,423,981	12,603,175
Licences and permits	1,386,175	1,978,395	1,447,114	3,759,717	30,789,026
Fees	447,406	794,020	1,254,234	873,093	7,814,361
Liquor traffic control	1,230,000	1,452,875	2,400,000	3,607,315	25,913,699
Fines and penalties	59,284	43,823	59,605	43,514	721,128
Profits from trading activities	4,233	53,345	4,275	22,391	199,461
Interest, premium, and exchange	1,903,205	2,463,924	816,098	351,948	18,964,137
Refunds of expenditure	74,628	193,775	913,002	739,984	3,108,547
Agriculture and public domain	138,442	217,866	96,631	714,965	3,186,987
Institutional revenue	223,986	134,533	329,515	853,986	4,447,351
Other	68,837	382,292	275,763	118,015	2,227,546
Totals, Ordinary Revenues	**17,214,854**	**18,388,857**	**20,743,046**	**31,575,892**	**268,497,670**
Capital Receipts—					
Proceeds of loans and borrowings	5,432,243	77,825,209	2,716,649	24,563,410	280,991,285
Sinking funds and investments (earnings, sale of, etc.)	2,603,231	Nil	925,421	667,938	7,197,864
Provincial Savings Office	Nil	"	Nil	Nil	15,721,279
Dominion Government	4,894,371	11,573,308	428,657	3,724,647	49,706,470
Sale of property or other capital assets	Nil	2,402	18,371	Nil	33,543
Refunds of expenditure or repayment of advances or loans	775,867	1,492,264	2,716,674	95	39,659,916
Agriculture and public domain	45,727	Nil	Nil	Nil	198,795
Other	5,315,956	1,575,462	17,147	"	7,439,343
Totals, Capital Receipts	**19,067,395**	**92,468,645**	**6,822,919**	**28,956,090**	**400,948,495**
Trust and Public Charities Funds Receipts—					
Marriage licences	Nil	Nil	Nil	Nil	12,444
Public charities fund	"	"	"	"	5,001,790
Deposits, guarantees, etc	213,689	"	"	"	5,726,974
Other	284,718	"	"	"	576,087
Totals, Trust and Public Charities Funds Receipts	**498,407**	**Nil**	**Nil**	**Nil**	**11,317,295**

33.—Ordinary, Capital, and Trust and Charity Expenditures of

(AMENDED UNIFORM

NOTE.—For information as to when the fiscal years

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
Ordinary Expenditures—					
Debt charges	490,907	4,064,054	3,867,329	9,932,875	31,139,631
Legislation	21,799	202,994	78,592	1,199,875	339,078
Administration and general government	139,298	903,278	590,536	5,210,140	5,786,918
Education	346,461	1,270,128	729,460	4,572,835	10,040,518
Legal and judicial administration	71,179	154,595	191,864	3,513,187	2,088,663
Transportation and communications	311,156	2,025,586	1,050,992	7,125,173	5,288,177
Agriculture and public domain	40,290	522,693	646,231	7,085,411	3,653,135
Public welfare	471,564	4,837,790	2,443,698	4,509,137	37,020,287
Other	58,380	57,835	2,350	807,642	2,418,089
Totals, Ordinary Expenditures	**1,951,034**	**14,038,953**	**9,601,052**	**43,956,275**	**97,774,496**
Capital Payments—					
Public debt retirement	500,000	4,904,189	1,917,433	20,950,589	142,106,593
Loans and advances, realizable assets	74,132	28,694	501,235	1,789,484	1,569,350
Administration and general government	1,246	88,205	14,800	924	762,578
Education	Nil	5,760	Nil	Nil	65,638
Administration of Justice building	13,523	Nil	"	"	Nil
Transportation and communications	107,411	8,009,284	10,142,465	6,287,469	6,965,926
Agriculture and public domain	64,055	49,894	Nil	3,020	512,886
Public welfare	405,011	1,714,803	696,209	24,252,379	21,204,226
Other	11,580	70,000	Nil	5,657,601	278,739
Totals, Capital Payments	**1,176,958**	**14,870,829**	**13,272,142**	**58,941,466**	**173,465,936**
Trust and Public Charities Funds Payments—					
Sinking funds, municipal, school corporations, and banks	Nil	Nil	1,329	2,191,346	Nil
Education	"	"	Nil	11,891	"
Public welfare	"	"	"	6,740,366	"
Deposits, judicial and other	"	"	22,064	1,821,244	"
Other	"	"	74,020	153,941	"
Totals, Trust and Public Charities Funds Payments	**Nil**	**Nil**	**97,413**	**10,918,788**	**Nil**

Provincial Governments for their respective fiscal years ended in 1937.

CLASSIFICATION.)

of the various provinces end, see text at foot of p. 909.

Item.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	$	$	$	$	$
Ordinary Expenditures—					
Debt charges	6,432,849	7,039,369	4,460,448	8,839,946	76,267,408
Legislation	270,493	168,653	193,676	246,075	2,721,235
Administration and general government	900,368	1,630,798	1,599,415	2,393,597	19,154,348
Education	1,690,578	2,921,591	2,674,323	3,991,640	28,237,534
Legal and judicial administration	723,814	977,430	838,848	1,522,757	10,082,337
Transportation and communications	582,416	935,087	1,035,846	2,823,876	21,178,309
Agriculture and public domain	645,582	767,095	838,061	1,820,248	16,018,746
Public welfare	5,019,722	5,169,180	8,883,185	7,176,598	75,531,161
Other	668,650	26,189	141,391	72,133	4,252,659
Totals, Ordinary Expenditures	**16,934,472**	**19,635,392**	**20,665,193**	**28,886,870**	**253,443,737**
Capital Payments—					
Public debt retirement	1,074,287	71,664,298	2,126,587	18,020,339	263,264,315
Loans and advances, realizable assets	721,795	415,000	2,791,045	110,000	8,000,735
Administration and general government	2,580	Nil	32,060	Nil	902,393
Education	Nil	"	608,178	"	679,576
Administration of Justice building	"	"	3,975	50	17,548
Transportation and communications	80,627	217,162	1,339,826	2,109,267	35,259,437
Agriculture and public domain	32,162	Nil	52,769	Nil	714,786
Public welfare	9,173,238	17,398,132	23,191	9,582,876	84,450,065
Other	6,746,103	2,774,053	336,106	Nil	15,874,182
Totals, Capital Payments	**17,830,792**	**92,468,645**	**7,313,737**	**29,822,532**	**409,163,037**
Trust and Public Charities Funds Payments—					
Sinking funds, municipal, school corporations, and banks	84,548	Nil	Nil	Nil	2,277,223
Education	Nil	"	"	"	11,891
Public welfare	"	"	"	"	6,740,366
Deposits, judicial and other	221,057	"	"	"	2,064,365
Other	116,524	"	"	"	344,485
Totals, Trust and Public Charities Funds Payments	**422,129**	**Nil**	**Nil**	**Nil**	**11,438,330**

Subsection 2.—Provincial Debts and Assets.

Bonded Indebtedness of the Provinces.—Of the total liabilities of the provinces the major part is represented by bonded debt owing to the public in Canada and abroad. The total gross bonded debt amounted to $1,440,294,809 in 1937 as compared with only $218,875,927 in 1916, an increase of over $1,220,000,000 in the 21 years. In addition to this bonded debt there were treasury bills outstanding on provincial accounts amounting to $241,598,174* for 1937. Figures of bonded debt for this and previous years to 1916 are given in Table **34.** The rapid rise in the bonded debt of the provinces from $218,875,927 in 1916 is accounted for largely by the development of public ownership of utilities (such as the "Hydro" in Ontario), the extension of the highways and surfaced roads systems in all provinces (highway debentures outstanding in 1937 accounting for $569,720,000 of the provincial debt), and the requirements for the promotion of industrial activities and public and social welfare. These demanded heavy expenditures which could not easily be met out of current revenue. The borrowings, while increasing the public debt, are in the main considered justifiable, as the public utilities are in most cases meeting from their revenues the interest on indebtedness incurred in their construction, and the provincial assets generally are sound enough to take care of capital investment for other services which are necessary to develop the country.

34.—Gross Bonded Debt (Exclusive of Treasury Bills) of Provincial Governments, by Provinces, for their respective fiscal years 1916, 1921, 1926, and 1931-37.

NOTE.—Figures for intervening years, from 1917-30, are given at p. 877 of the 1938 Year Book.

Fiscal Year.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
	$	$	$	$	$
1916	733,000	13,443,087	9,100,647	38,346,128	52,411,401
1921	858,000	20,678,267	23,573,432	51,652,113	184,693,420
1926	1,873,000	35,986,324	35,325,909	78,004,926	280,559,094
1931	2,104,000	60,325,613	45,858,996	84,235,292	455,375,344
1932	3,504,000	61,740,747	58,739,663	91,987,692	499,986,011
1933	3,754,000	66,439,880	61,935,163	110,237,892	522,687,345
1934	4,554,000	73,476,013	63,570,920	126,518,007	600,454,102
1935	5,754,000	85,866,647	67,562,920	149,748,007	594,088,188
1936	6,029,000	86,974,113	74,049,920	164,747,607	602,027,288
1937	6,104,000	92,969,247	76,613,920	195,170,199	576,886,147

Fiscal Year.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
	$	$	$	$	$
1916	30,396,274	24,292,044	29,000,200	21,153,146	218,875,927
1921	61,929,870	41,785,436	59,010,257	46,511,436	490,692,231
1926	64,433,595	54,114,176[1]	86,894,666	71,485,736	708,677,426
1931	81,381,906	85,141,205	106,866,573	95,358,236	1,016,647,165
1932	89,630,906	101,831,236	128,970,593	111,932,236	1,148,323,084
1933	90,938,906	109,209,642	133,837,260	125,332,736	1,224,372,824
1934	90,024,906	112,868,207	129,055,260	129,163,236	1,329,684,651
1935	92,136,606	121,109,740	129,744,260	127,311,236	1,373,321,604
1936	95,480,881	124,446,374	128,140,260	144,398,236	1,426,293,679
1937	94,962,481	124,043,319	127,999,260	145,546,236	1,440,294,809

[1] Liabilities statement is for Apr. 30; this amount includes $500,000 due May 1.

Total Provincial Public Debt.—Table **35** gives a classified analysis of the public debt of Provincial Governments at the close of their fiscal years in 1936 and 1937.

---

* Including $5,865,000 which the province of New Brunswick considered a current liability.

35.—Debts of Provincial Governments at the ends of their respective fiscal years in 1936 and 1937, showing Bonded Debt with offsetting Sinking Funds, Treasury Bills, Other Direct Liabilities, Available Assets offsetting Direct Liabilities, and Indirect Liabilities.

NOTE.—For dates on which the fiscal years of the provinces end, see text on p. 909. For details for 1935 see the 1938 Year Book, p. 878.

Year and Province.	Direct Liabilities.									Total Indirect Liabilities.
	Funded Debt.					Other Direct Liabilities.	Total Direct Liabilities (less sinking funds).	Assets Available or Realizable[1] (deductible).	Total Net Direct Liabilities.	
	Bonded Debt.			Treasury Bills.	Net Funded Debt.					
	Total Gross Bonded or Debenture Debt.	Sinking Funds (deductible).	Net Bonded or Debenture Debt.							
	$	$	$	$	$	$	$	$	$	$
Totals, 1935	**1,373,321,604**	**95,916,799**	**1,277,404,805**	**185,332,114**[2]	**1,462,736,919**	**158,716,717**	**1,621,453,636**	**646,767,819**	**974,685,817**	**231,294,836**
1936.										
Prince Edward Island	6,029,000	1,315,832	4,713,168	Nil	4,713,168	1,676,459	6,389,627	1,063,345	5,326,282	Nil
Nova Scotia	86,974,113	5,822,665	81,151,448	"	81,151,448	7,927,050	89,078,498	25,219,009	63,859,489	591,687
New Brunswick	74,049,920	8,816,471	65,233,449	600,000[3]	65,833,449	3,634,304	69,467,753	12,701,980	56,765,773	1,760,497
Quebec	164,747,607	21,112,125	143,635,482	26,575,000	170,210,482	47,188,002	217,398,484	49,268,335	168,130,149	10,229,301
Ontario	602,027,288	7,914,333	594,112,955	50,000,000	644,112,955	45,445,559	689,558,514	283,519,691[4]	406,038,823	113,968,417
Manitoba	95,480,881	9,350,881	86,130,000	28,623,826	114,753,826	12,437,419	127,191,245	78,611,384	48,579,861	7,436,969
Saskatchewan	124,446,374	9,585,191	114,861,183	68,189,135	183,050,318	21,464.344	204,514,662	121,280,092	83,234,570	33,691,987
Alberta	128,140,260	10,625,979	117,514,281	25,426,750	142,941,031	21,358,709	164,299,740	50,750,414	113,549,326	8,554,346
British Columbia	144,398,236	31,058,958	113,339,278	33,513,587	146,852,865	18,968,319	165,821,184	27,198,255	138,622,929	48,315,998
Totals, 1936	**1,426,293,679**	**105,602,435**	**1,320,691,244**	**232,928,298**[2]	**1,553,619,542**	**180,100,165**	**1,733,719,707**	**649,612,505**	**1,084,107,202**	**224,549,202**
1937.										
Prince Edward Island	6,104,000	1,445,683	4,658,317	Nil	4,658,317	2,095,660	6,753,977	958,299	5,795,678	Nil
Nova Scotia	92,969,247	6,371,632	86,597,615	2,250,000	88,847,615	6,053,366	94,900,981	26,605,648	68,295,333	502,031
New Brunswick	76,613,920	10,032,833	66,581,087	5,865,000[3]	72,446,087	6,160,768	78,606,855	13,194,172	65,412,683	1,948,660
Quebec	195,170,199	21,526,965	173,643,234	22,250,000	195,893,234	51,439,965	247,333,199	55,313,938	192,019,261	8,932,250
Ontario	576,886,147	8,913,016	567,973,131	38,000,000	605,973,131	50,487,217	656,460,348	251,024,309[4]	405,436,039	138,375,600
Manitoba	94,962,481	10,121,984	84,840,497	33,191,158	118,031,655	10,565,886	128,597,541	60,828,401	67,769,140	7,355,409
Saskatchewan	124,043,319	11,414,644	112,628,675	75,758,532	188,387,207	11,103,661	199,490,868	71,512,855[5]	127,978,013	37,312,658
Alberta	127,999,260	11,399,555	116,599,705	26,887,498	143,487,203	19,475,507	162,962,710	38,621.544	124,341,166	7,795,619
British Columbia	145,546,236	32,620,668	112,925,568	37,395,986	150,321,554	23,028,942	173,350,496	30,917,050	142,433,446	48,422,915
Totals, 1937	**1,440,294,809**	**113,846,980**	**1,326,447,829**	**241,598,174**[2]	**1,568,046,003**	**180,410,972**	**1,748,456,975**	**548,976,216**	**1,199,480,759**	**250,645,142**

---

[1] In addition to the available assets shown most of the provinces had partially secured loans and advances for railways, dyking districts, unemployment relief, and grain relief, etc., a large portion of which will be realizable. [2] Including treasury bills regarded as current debt by New Brunswick. [3] New Brunswick considers this a current liability. [4] Ontario does not consider as "available assets" Dominion Debt Account; Common School Fund; Quebec Turnpike; and Plant, Live Stock, and Equipment. [5] The large reduction, as compared with 1936, is accounted for by the smaller amounts receivable for relief purposes and the fact that trust funds are not now included as "available assets".

Interest Payments and Receipts of the Provinces.—The current burden of a debt in the case of a continuing organization is represented by interest payments, which may be offset in whole or in part by interest received on loans made to provincially-owned public utilities or to corporations or individual citizens. In a country where provincial public policy varies widely with regard to public ownership, it appears desirable to include a statement showing, for each province, the gross interest payments, the interest receipts, and the net interest payments. This information is given below for the provincial years ended in 1937. (See text at foot of p. 909 for respective dates).

Province.	Gross Interest Paid.	Interest Received.	Net Interest Paid.	Net Interest Paid per Capita.[1]
	$	$	$	$
Prince Edward Island	283,239	Nil	283,239	3·05
Nova Scotia	3,661,999	902,851	2,759,148	5·09
New Brunswick	3,534,624	437,601	3,097,023	7·04
Quebec	5,902,138	1,098,979	4,803,159	1·53
Ontario	28,867,175	10,615,508	18,239,791	4·92
Manitoba	5,791,591	1,903,205	3,888,386	5·42
Saskatchewan	6,647,216	2,463,924	4,183,292	4·46
Alberta	4,425,509	816,093	3,609,411	4·64
British Columbia	8,109,307	351,948	7,757,359	10·33

[1] Estimates of population on which these figures are based are given on p. 113.

Section 3.—Municipal Public Finance.*

The existence of local self-governing units has always been characteristic of democratic societies, and nowhere more so than in Canada. The struggle for responsible government was naturally accompanied by an agitation for local self-government in the cities and towns of Canada and, after responsible government had been conceded, a complete system of municipalities was established throughout the old Province of Canada by the Municipal Act of 1849.† Under the division of powers made by the British North America Act between the Dominion and the Provincial Governments, legislation regarding municipal government, being a local matter, was naturally assigned to the provinces, which differ considerably with regard to their types of municipal organization. Thus, in Prince Edward Island the only incorporated municipalities are the city of Charlottetown and seven incorporated towns. In British Columbia seven of the 33 cities have fewer than 1,000 people, while there are no towns at all and only 18 villages; again, in the same province the rural districts are mainly administered from the provincial capital, there being only 28 rural municipalities. Finally, in Saskatchewan and Alberta there exist local improvement districts, areas which have not as yet been organized into rural municipalities, where the taxes are levied, collected, and expended by the Provincial Governments. Such districts, however, may be regarded as on the way to becoming self-governing rural municipalities. Their statistics are therefore included in Table 36 which gives statistics of the numbers and types of municipalities in 1936.

---

* Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics. This Branch issues statements on "Financial Statistics of Urban Municipalities of 10,000 Population and Over", on "Bonded Indebtedness of Municipalities" and on "Assessment Valuations of Municipalities". For a list of publications see Chapter XXIX, Section 1, under "Finance".

† For a brief outline of the rise of the municipal system of Ontario, see 1922-23 Year Book, p. 108.

36.—Numbers of Municipalities, by Provinces and Classes, 1936.

Province.	Cities.	Towns.	Villages.	Counties.	Other Rural Municipalities.	Local Improvement Districts.	Suburban Municipalities.	Total.
P.E. Island	1	7	Nil	Nil	Nil	Nil	Nil	8
Nova Scotia	2	43	"	[1]	24	"	"	69
New Brunswick	3	20	2	15	Nil	"	"	40
Quebec	26	102	305	76	1,031	"	"	1,540
Ontario	27	145	156	38[2]	571[3]	"	"	937
Manitoba	4	31[4]	22	Nil	112	"	5	174
Saskatchewan	8	81	382	"	302	82	Nil	855
Alberta	7	52	146	"	161	240	"	606
British Columbia	33	Nil	18	"	28	Nil	"	79
Totals	**111**	**481**	**1,031**	**129**	**2,229**	**322**	**5**	**4,308**

[1] Nova Scotia has 18 counties, some of which are 'municipalities', while others are divided into 'municipalities'. [2] There are 43 counties in all, geographically, but a number are united for municipal purposes. [3] Officially known as 'townships'. [4] Includes Flinflon Municipal District.

Municipal Revenue from Taxation.—As a result of accumulated borrowings to meet conditions peculiar to the depression, the relentless advance of interest charges against realizable taxation has brought about a condition in many municipalities where expenditures are out of all proportion to receipts, in spite of the fact that the trend of interest rates has been definitely downwards. It is natural under such conditions that the general subject of taxation should receive the increasing attention of the public and, of all forms of taxation, the imposition of municipal taxes—where the tax is applied broadly to assessed valuations placed on homes and other real property and on incomes and business—hits the ratepayer's pocket most directly.

In view of the wide public interest in municipal taxation, the Dominion Bureau of Statistics published a bulletin giving as complete a picture as is possible of tax levies and taxation receipts of municipalities, classified into cities, towns, and rural municipalities, by provinces, for the years 1913-36.* The following summary table, taken therefrom, gives figures of tax receipts for these years so far as they are available. Unfortunately, there are certain inconsistencies and omissions, as between provinces, which the footnotes to the table attempt to explain.

---

* See the bulletin "Municipal Tax Levies and Receipts, by Provinces", obtainable from the Dominion Statistician.

37.—Tax Receipts of Municipalities in Canada, by Provinces, 1913-36.

Year.	P.E.I.[1]	N.S.	N.B.[2]	Que.	Ont.	Man.	Sask.	Alta.	B.C.[3]
	$	$	$	$	$	$	$	$	$
1913....	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]	[4]
1914....									
1915....				33,288,115					
1916....				32,131,489					
1917....				33,222,593					9,382,099
1918....		3,462,587		36,628,407					10,630,355
1919....		3,443,681		47,001,911					14,096,799
1920....		4,099,780		53,929,349					15,519,092
1921....		4,727,730		60,400,650			22,278,621		14,664,292[3]
1922....		5,229,302		57,311,990			27,314,503		14,627,777[3]
1923....		6,367,966		58,857,190			26,079,908		14,506,982
1924....		6,184,398		64,236,251	94,526,271		26,009,764	10,706,183	13,856,416
1925....		6,012,030		65,654,871	94,559,210		27,245,639	9,694,632	14,748,216
1926....		6,397,612		67,779,258	96,703,171		26,300,069	12,433,696	14,858,435
1927....		6,576,609		71,044,091	103,426,618		26,241,928	10,572,853	15,208,181
1928....		6,801,365		62,619,679	107,449,970		27,369,597	9,583,254	16,153,676
1929....		6,813,918		69,450,228	116,693.006		26,612,226	11,005,241	17,345,523
1930....		6,642,094		73,337,620	120,627,896		20,779,829	10,424,676	17,989,046
1931....	168,646	6,605,580	2,598,910	73,761,481	122,316,767	6,998,963[5]	18,392,914	10,255,692	18,260,430
1932....	145,830	6,613,675	2,441,063	79,612,584	121,284,311	17,290,889	17,616,414	12,032,471	17,089,972
1933....	156,135	6,440,471	2,295,247	79,471,242	116,920,000	17,104,553	15,822,648	11,661,595	17,521,554
1934....	164,158	7,108,035	2,207,230[2]	59,729,973[6]	117,892,884	18,187,714	16,624,783	12,218,328	18,002,475
1935....	168,262	7,273,053[7]	2,353,811	59,253,714	122,108,912	16,622,464	16,769,993	10,900,409	17,185,917
1936....	186,152	7,403,541	5,033,039[8]	65,445,212	121,825,930	18,342,869	16,672,335	11,325,644	17,070,680

---

[1] Statistics are for Charlottetown only. [2] Cities of Saint John, Moncton, and Fredericton only for 1931-33; for Saint John and Moncton only for 1934 and 1935. [3] B.C. has no municipal organization of towns and provision was first made for villages in 1922. Statistics of tax receipts for cities and rural districts are shown from 1917–21, and those for cities, villages, and rural districts from 1922. [4] Figures not available. [5] The figure shown is for all municipalities except cities, whereas cities are included for other years. A comparable figure is not obtainable but receipts for Winnipeg were $10,874,891, and the total *tax imposition* for the cities of Brandon, Portage la Prairie, and St. Boniface was $1,652,241 in 1931. [6] Revenues for municipalities and receipts for schools. Statistics are not comparable with those previous to 1934 owing to modifications of provincial reports. [7] Revised since the publication of the 1938 Year Book. [8] Statistics of taxation receipts covering all municipalities were published for the first time in 1936.

Municipal Assessments.—The chief basis of municipal tax revenue is the real estate within the limits of the municipalities; though, as indicated above, in certain provinces personal property, income, and business carried on are also taxed. General taxes are normally assessed at the rate of so many mills on the dollar of the assessed valuations. In the Prairie Provinces, the values of improvements made to real property are often rated at a very low figure, e.g., in Saskatchewan, where the taxable valuations of buildings are about 12 p.c. of the taxable valuations of lands, and in Alberta, where they are about 30 p.c. of the taxable valuations of lands, as shown in Table **38**.

There are various reasons for fluctuations in assessment valuations, due to differences in laws and varying practices with regard to assessment as among provinces, as among classes of municipalities, and as among municipalities of the same class from year to year. Such matters are more fully dealt with in the special report of the Dominion Bureau of Statistics on "Assessment Valuations by Provinces", obtainable from the Dominion Statistician.

Lands in the West, valuations for which in earlier years were somewhat inflated, have of late been assessed on a sounder basis, and in some provinces the Equalization Boards have placed a more equitable valuation on lands as among the various rural municipalities.

38.—Summary Statement showing Total Assessment Valuations of Municipalities, by Provinces, 1932-36.

NOTE.—Corresponding figures for 1927 and 1928 are given at p. 824 of the 1930 Year Book and for 1929-31 at p. 874 of the 1936 Year Book. Data for earlier years are given in previous editions.

Province.	Taxable Real Property.		Personal Property.	Income.	Total Taxable Valuations.[1]	Exempted Property.
	Land.	Total, Land and Buildings.				
	$	$	$	$	$	$
P.E.I. 1932	2	33,679,705	5,350,022	3	39,258,331	1,826,000
1933		33,731,795	6,307,809		40,220,965	5,183,790
1934		33,987,896	6,217,767		40,385,822	5,187,040
1935		34,065,474	6,322,012		40,388,851	8,225,030
1936		34,131,877	6,427,925		40,561,202	8,259,050
N.S. 1932	2	141,006,134[4]	23,887,409[4,5]	2,091,162[4,5]	178,563,967[4]	47,524,274
1933		139,323,274[4]	22,616,603[4,5]	1,198,436[4,5]	174,180,858[4]	45,513,267
1934		137,808,458	22,071,512[5]	1,081,182[5]	171,701,982	44,961,175
1935		137,172,626	22,298,294[5]	1,133,393[5]	171,345,143	47,309,476
1936		137,076,180	22,796,404[5]	725,348[5]	171,109,587	45,940,264
N.B. 1932	2	127,865,063	20,592,746	2	148,457,809	2
1933		129,634,462	19,580,954		149,215,416	
1934		126,366,539	19,333,049		145,699,588	
1935		123,570,899	18,227,865		141,798,764	
1936		117,976,386	13,072,457	28,024,270	168,456,159	64,319,825
Que. 1932	2	2,226,143,786	3	2	2,269,148,711	726,626,886[6]
1933		2,192,446,982			2,240,825,176	741,701,310[6]
1934		2,184,368,606			2,233,093,702	743,230,611[6]
1935		2,173,591,643			2,224,039,302	734,498,153[6]
1936		2,146,101,583			2,199,369,834	738,067,746[6]
Ont. 1932	1,322,677,599	2,839,752,534	3	123,027,653	3,207,396,156[7]	559,613,040
1933	1,298,794,571	2,817,352,141		105,838,712	3,163,733,491[7]	578,130,065
1934	1,266,175,295	2,702,400,638		86,035,072	3,023,011,441[7]	587,889,203
1935	2	2,685,249,332		71,500,340	3,000,835,872[7]	380,845,652[8]
1936	1,263,202,479	2,679,132,724		10,930,854[9]	3,002,146,474[7]	386,428,507[8]
Man. 1932	2	536,413,841	5,989,568	3	552,296,364	158,588,317
1933		502,767,941	5,769,755		517,628,197	162,430,924
1934		495,428,343	5,595,233		509,753,890	162,235,639
1935		471,645,195	5,479,320		487,829,469	159,039,314
1936		461,402,958	5,329,075		477,221,364	159,619,526
Sask. 1932	968,674,804	1,088,167,082	3	3	1,129,447,552	2
1933	959,838,291	1,076,520,081			1,115,773,324	
1934	950,175,177	1,067,714,102			1,106,016,437	
1935	941,489,766	1,058,009,449			1,096,061,102	
1936	932,992,544	1,049,145,800			1,087,413,856	
Alta. 1932	446,925,085[10]	571,119,947[10]	3	3	589,424,200[10]	2
1933	445,610,003[10]	567,605,428[10]			586,965,175[10]	
1934	437,678,242[10]	560,408,966[10]			577,407,878[10]	
1935	383,233,937[10]	501,630,807[10]			518,180,058[10]	
1936	384,883,284[10]	501,092,352[10]			519,710,605[10]	
B.C. 1932	293,986,938	677,355,920	3	3	677,355,920	151,520,124
1933	277,291,181	640,461,800			640,461,800	145,988,409
1934	268,996,902	625,762,235			625,762,235	146,434,234
1935	243,225,090	583,756,323			583,756,323	146,685,827
1936	242,488,675	452,684,537			452,684,537	146,925,242
Totals..... 1932	11	**8,241,504,012**[12]	11	11	**8,791,349,010**[12]	11
1933		**8,099,843,904**[12]			**8,629,004,402**[12]	
1934		**7,934,245,783**[12]			**8,432,832,975**[12]	
1935		**7,768,691,748**[12]			**8,264,234,884**[12]	
1936		**7,578,744,397**[12]			**8,118,673,618**[12]	

---

[1] Includes certain taxable valuations not specified. [2] Not available. [3] No assessment in this province. [4] Includes exemptions for municipality of Cumberland, Nova Scotia. [5] In Nova Scotia personal property and income assessments for cities are for Sydney only. [6] Includes property temporarily exempted. [7] In addition, assessments for schools only in Ontario were: townships $4,976,492, towns and villages $18,249,670, and cities $86,803,023 in 1932; townships $3,495,026, towns and villages $12,884,022, and cities $86,638,946 in 1933; townships $2,636,133, villages $1,167,415, towns $16,656,397, and cities $86,657,415 in 1934; and cities $84,204,218 in 1935. Statistics for 1936 include $82,787,073 assessment for school purposes only for cities. Assessments for school purposes only for other municipalities were not shown in the Ontario reports for 1935 and 1936. [8] Cities only. [9] Corporation income only. [10] Local improvement districts not included. [11] Complete totals not available. [12] In interpreting these totals, footnotes to the constituent items should be noted.

Bonded Indebtedness.—Like other Canadian governing bodies the municipalities of the greater part of Canada borrowed rather freely during the boom period of 1900-12, and again during the nineteen-twenties. The bonded indebtedness of

Ontario municipalities rose from $153,568,409 in 1913 to $431,546,483 in 1936, while that of Quebec municipalities increased from $173,720,141 in 1915 to $513,113,001 in 1936, and a proportionate increase took place in other provinces. The recent growth in the bonded indebtedness of all classes of municipalities is shown by provinces in Table **39**. The figures show that there was an increase in 1936 over 1935 in the provinces of Prince Edward Island, Nova Scotia, Quebec, Manitoba, Saskatchewan, and Alberta; the others showed a decrease. In Saskatchewan, net debenture debt is shown for all municipalities in 1919, while from 1920 the statistics represent gross debenture debt. In Alberta in the earlier years, figures represent principally net debenture debt but from 1929 gross debenture debt is shown. All other provinces give gross total debenture debt throughout.

39.—Total Bonded Indebtedness of All Classes of Municipalities, by Provinces, 1919-36.

NOTE.—Figures are for gross debenture debt unless otherwise indicated.

Year.	Prince Edward Island.[1]	Nova Scotia.	New Brunswick.[2]	Quebec.	Ontario.	Manitoba.	Saskatchewan.[3]	Alberta.	British Columbia.	Total.[4]
	$	$	$	$	$	$	$	$	$	$
1919	970,100[1]	17,863,881	11,188,467	199,705,568	243,226,877	55,562,788	39,585,388[5]	66,870,464[5]	94,741,615	729,715,148[4]
1920	1,086,500[1]	19,192,462	10,841,466	224,269.714	269,727,271	57,820,588	40,611,271	57,205,275[5]	96,107,911	776,862,458[4]
1921	1,202,200[1]	22,451,743	7,578,567	230,955,538	317,613,283	65,463,239	41,180,255	53,429,558[5]	97,495,984	837,370,367[4]
1922	1,254,900[1]	23,541,759	10,025,633	246,920,376	349,276.606	68,811,040	59,719,165	60.832,650[5]	98,761,630	919,143,759[4]
1923	1,290,800[1]	24,248,782	7,974,362	260,907,356	376,512,002	73,908,963	59,011,174	70,999,611[5]	96,273,987	971,127,037[4]
1924	1,143,550[1]	25,348,664	17,350.225	276,834,787	430,010.501	73,944,105	57,763,699	65,414,317[5]	96,106,151	1,043,915,999[4]
1925	1,163,050[1]	25,722,635	10,660.863	281,213,213	405.178,853	79,211,867	55,835,505	57,908,593[5]	99,055,201	1,015,949,780[4]
1926	1,247,545[1]	26,281,152	17,091,550	296,746.090	413,474,813	80,716,272	54,844,759	56,950,712[5]	102,853,228	1,050,206,121[4]
1927	1,452,425[1]	28,381,616	15,707,699	313,416,960	434,464,056	83,017,302	54,361,158	62,414,660[5]	107,376,118	1,100,591,994[4]
1928	1,515,125[1]	29,049,412	19,584,335	335,784,811	435.912.807	85,651,906	53,092,330	63,428,853[5]	110,124,819	1,134,144,398[4]
1929	1,598,624[1]	29,029,119	21,343,890	352,291,456	451,936,592	85,901,404	54,913,100	78,473,392	118,483,618	1,193,971,195[4]
1930	1,863,211[1]	30,182,264	20,942,988	384,763,515	485,280,182	84,879,707	59,000,183	78,645,803	125,832,088	1,271,389,941[4]
1931	1,959,672[1]	31,386,025	22,165,501	427,815,926	499,002,074	91,615,195	59,146,592	78,679,571	129,913,890	1,341,684,446[4]
1932	2,129,350[1]	31,606,140	24,752,873	463,613,696	504,755,977	92,471,256	59,238,281	76,892,413	129,332,791	1,384,792,777[4]
1933	2,147,650[1]	32,772,717	24,667,909	479,608.472	494,433,956	96,076,856[6]	57,288,400	69,455,181	128,094,159	1,384,545,300[4]
1934	2,348,275[1]	33,318,115	26,495,037	493,867,826[8]	483,952,700	90,767,215	55,692,110	67,886,011	127,172,942	1,881,500,231[4,8]
1935	2,479,550[1]	33,866,913	27,538,898	500,788,727[8]	461,653,182	95,557,149[7]	55,519,672	67,251,233	127,370,560	1,372,025,884[4,8]
1936	2,510,675[1]	34,211,220	26,796,910	513,113.001	431,546,483	95,883,699[7]	55,582,491	67,641,130	125,838,619	1,353,124,228[4]

---

[1] Figures include Charlottetown for all years and for 1919-23 Summerside and Montague are also included; figures include Kensington for 1924-33; Montague for 1925-33; Summerside, Souris, Georgetown, and Alberton 1926-33; and Borden 1932-33. For later years the figures include all eight incorporated municipalities of the province.

[2] Municipalities included cannot be enumerated for the years 1919-23; figures are for 3 cities, 18 towns, 2 villages, and 15 counties in 1924; 2 cities, 13 towns, 2 villages, and 15 counties in 1925; 3 cities, 18 towns, 1 village, and 15 counties in 1926; 3 cities, 23 towns, 4 villages, and 15 counties in 1927, 1928 and 1929; 3 cities, 19 towns, 2 villages, and 15 counties in 1930; and 3 cities, 20 towns, 2 villages, and 15 counties from 1931.

[3] Statistics of school debt for villages and rural municipalities not included.

[4] Footnotes on constituent items should be noted in interpreting these totals.

[5] Net debenture debt.

[6] Includes deferred liabilities, not separable.

[7] Includes schools.

[8] Revised since the publication of the 1938 Year Book.

40.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1936.

NOTE.—Population figures for Manitoba, Saskatchewan, and Alberta are Census of 1936.

Province and City.	Area.	Population as Furnished by Municipality.	Total Assessed Value of Taxable Property.	Grand Total Receipts.	Grand Total Expenditures.	Total Assets.	Total Liabilities.
	acres.	No.	$	$	$	$	$
Prince Edward Island—							
Charlottetown	810	13,883	9,156,124	248,259	270,145	3,229,512	2,497,789
Nova Scotia—							
Halifax	4,403	59,275[1]	58,263,755	3,418,435	3,418,435	21,775,514	21,775,513
Sydney	3,730	25,000	12,197,865	1,477,477	1,477,477	5,621,582	5,621,582
Glace Bay	6,202	20,706[1]	5,150,850	1,144,348	1,081,309	2,607,412	1,706,729
New Brunswick—							
Saint John	13,440	50,000	47,655,969	2,918,874	2,685,846	15,987,549	10,302,530
Moncton	2,093	21,939	24,357,838	1,023,955	950,661	7,859,658	7,323,240
Fredericton	10,790	10,135	9,855,750	463,090	463,090	1,918,499	1,044,979
Quebec—							
Montreal	32,254	875,000	957,305,882	44,132,682	44,723,849	433,374,617	418,096,124
Quebec	5.754	149,400	129,850,361	5,460,515	5,563,985	57,366,564	53,482,277
Verdun	1.426	62,148	43,269,240	2,274,602	2,292,409	17,657,481	17,462,737
Three Rivers	2,560	42,000	29,740,730	2,068,836	2,089,747	15,606,237	17,646,074
Sherbrooke	3,104	30,908	28,755,492	1,601,767	1,510,331	14,332.648	9,895,172
Hull	4,000	30,058	20,806,839	941,746	912,577	7,621,025	7,533,100
Outremont	975	29,719	36,932,652	1,369,264	1,507,729	10,588,193	10,047,472
Westmount	976	26,000	67,344,992	2,012,155	1,985,346	16,071,582	15,086,304
Lachine	2,996	19,151	21,000,677	891,160	828,673	9,479,807	8,843,899
Shawinigan Falls	1,610	16,800	26,715,330	813,825	788,339	7,439,498	7,127,539
St. Hyacinthe	1,170	16,031	13,289,291	487,836	457,536	3,510,821	2,061,447
Chicoutimi	1,570	13,020	6,910,647	296,355	358,648	3,744,742	2,916,133
Valleyfield	600	12,941	6,802,416	350,506	338,364	2,030,858	1,766,936
St. Jean	1,331	12,600	11,580,067	320,825	317,435	3,022,885	2,313,992
Granby	960	12,573	6,743,689	237,637	244,092	1,802,515	1,108,466
Joliette	1,288	12,227	5,653,202	317,255	318,152	2,631,945	1,670,951
Lévis	2,222	11,873	6,063,062	272,390	278,558	2,193,221	1,445,382
Sorel	2,000	11,302	5,387,850	304,302	329,883	1,877,166	1,698,695
Jonquière	1,800	11,200	4,362,975	270,468	273,750	2,741,937	2,741,905
Thetford Mines	2,080	11,000	6,118,250	208,145	198,084	1,529,146	589,795
Cap-de-la-Madeleine	4,275	10,123	5,639,871	201,458	207,069	1,930,778	1,595,730
St. Jérôme	9,404	10,021	4,731,115	218,874	213,330	2,048,292	1,216,672
Ontario—							
Toronto	12,932	645,462	979,697,947	36,481,641[2]			
Hamilton	9,273	154,020	164,174,540	7,027,198[2]			
Ottawa	2,967	141,903	154,701,140	6,800,874[2]			
Windsor	4,135	101,435	92,767,010	4,427,745[2]			
London	7,231	73,091	83,213,810	3,529,936[2]			
Kitchener	3,270	32,650	25,664,546	1,349,272[2]			
Brantford	1,709	31,232	27,107,775	1,293,266[2]			
St. Catharines	1,860	26,834	24,164,272	1,160,043[2]			
Oshawa	2,589	24,692	15,681,050	991,565[2]			
Sudbury	1,479	24,440	12,772,415	901,705[2]			
Fort William	9,865	24,231	29,610,362	1,228,301[2]			
Sault Ste. Marie	3,216	23,627	19,346,596	802,747[2]			
Kingston	2,641	23,513	18,892,160	906,109[2]			
Peterborough	1,829	23,072	24,243,785	940,219[2]			
Guelph	2,476	21,455	13,885,077	812,156[2]	[3]	[3]	[3]
Timmins	734	20,869	7,405,418	[4]			
Port Arthur	4,768	20,045	26,348,107	1,069,119[2]			
Niagara Falls	1,278	18,747	18,497,867	854,817[2]			
Sarnia	1,375	18,230	17,741,777	745,272[2]			
Stratford	1,877	17,555	13,748,310	722,479[2]			
St. Thomas	1,898	16,088	15,065,570	645,754[2]			
Chatham	1,000	15,910	14,351,715	537,872[2]			
North Bay	1,379	15,161	9,539,498	641,744[2]			
Belleville	1,800	14,509	10,151,730	619,092[2]			
Galt	1,330	14,119	10,925,785	517,310[2]			
Owen Sound	2,148	13,100	8,499,702	429,910[2]			
Cornwall	547	12,681	9,586,205	[4]			
Woodstock	1,525	11,040	7,391,923	330,991[2]			
Welland	768	10,540	10,008,337	473,751[2]			
Pembroke	1,323	10,326	5,165,248	[4]			

---

[1] Census of 1931. [2] Total receipts are not available; this figure of total tax collections represents by far the major portion of receipts. [3] Owing to a revision of the system of reporting municipal statistics, incomplete returns only are available for receipts, expenditures, assets, and liabilities. [4] Not available.

40.—Principal Financial and Other Statistics of Canadian Cities and Towns with Populations of 10,000 or Over, 1936—concluded.

Province and City.	Area.	Population as Furnished by Municipality.	Total Assessed Value of Taxable Property.	Grand Total Receipts.	Grand Total Expenditures.	Total Assets.	Total Liabilities.
	acres.	No.	$	$	$	$	$
Manitoba—							
Winnipeg	15,287	215,814	207,326,865	[1]	[1]	46,576,629[2]	78,629,195
Brandon	5,427	16,461	11,443,225	[1]	[1]	3,838,689[2]	4,618,448
St. Boniface	11,642	16,275	8,924,525	[1]	[1]	6,287,951[2]	8,201,890
Saskatchewan—							
Regina	8,936	53,354	42,146,043	6,523,354	6,018,955	28,642,697	19,029,919
Saskatoon	8,000	41,734	33,612,143	4,792,846	4,692,991	20,989,057	17,667,244
Moose Jaw	9,410	19,805	17,942,410	1,743,540	1,476,024	12,702,524	7,165,608
Prince Albert	9,713	11,049	6,693,081	623,090	616,604	4,821,574	3,781,905
Alberta—							
Calgary	25,920	83,407	61,315,763	5,476,723	5,503,475	[1]	25,673,503
Edmonton	27,200	85,774	54,063,020	8,965,961	6,433,387	[1]	39,770,643
Lethbridge	6,944	13,523	9,561,595	833,430	752,812	[1]	4,283,883
British Columbia—							
Vancouver	27,965	253,363	224,856,201	12,739,753	13,911,654	101,051,075	104,626,189
Victoria	4,637	39,082	40,419,771	6,026,961	5,899,564	21,760,023	17,355,653
New Westminster	3,481	17,524	16,525,342	2,194,131	2,188,029	11,302,721	7,303,649

[1] Not available. [2] Real property and public utility assets not included.

Section 4.—National Wealth and Income.

Subsection 1.—National Wealth.

Notwithstanding the enormous statistical and economic difficulties inherent in any evaluation of the national wealth, the justification for such attempts lies in the importance of such information for an analysis of a nation's social and economic position. A general idea of the size and composition of the national wealth is essential for the intelligent consideration of many problems, both national and international, although, in view of the numerous elements of uncertainty in a calculation of this nature, the statistics must be regarded as indicative rather than strictly accurate; when carefully prepared they hold a very important place in a national statistical system.

There are several methods of computing national wealth, *i.e.*, the aggregate value of the public and private property within the nation apart from undeveloped natural resources. Perhaps the most familiar of these methods is that of working back to capital values through income tax returns, but this can be applied only in countries where small as well as large incomes are assessed for income tax. A second method is that of estimation from probate returns, the value of the estates of deceased persons being regarded as representative. A third is that of a complete census, based upon a canvass of the individual. A fourth method, namely, the so-called 'inventory' method, is often employed.* The estimate of Canada's wealth herein presented is based on the inventory principle, *i.e.*, an attempt is made to secure for the nation an approximation of the businessman's inventory of his possessions. This method consists in totalling the amounts known from various sources to be invested in agriculture, manufacturing, dwellings, etc. It does not include the value of undeveloped natural resources but only natural wealth which has been appropriated. For instance, it includes the value of the machinery and other capital equipment used in coal mining but not the unmined coal; the boats used in fishing but not the fish in the sea; the power plants and equipment used in developing water power but not the waterfalls themselves. In the case of forest wealth partial exception is made by the inclusion of accessible raw materials. When making comparison between the different provinces it should be remembered that this method tends to understate the potential wealth of any section of the country which is rich in mines, fisheries, or water power for, while it is next to impossible to estimate what such resources are worth, in so far as they are known to exist and to be capable of profitable development under present conditions they undoubtedly have value.

---

* An explanation of method and of the background of early estimates of national wealth as applied to Canada will be found in the article "The Wealth of Canada and Other Nations" by R. H. Coats, Dominion Statistician, published in the Journal of the Canadian Bankers' Association, October, 1919.

Whatever method is used, difficulty arises when we try to reduce all the things which go to make up wealth (things which once created are not themselves subject to violent change) to a common denominator. Estimates of national wealth must always be expressed in terms of the national currency. Yet the purchasing power of the currency unit is always fluctuating and following 1929 increased at one point (February, 1933) by more than 50 p.c. in terms of wholesale prices. Even in 1930, the average index number of wholesale prices was down by nearly 10 p.c. from 1929, while in December of that year the average index number of wholesale prices was 19 p.c. lower than in the same month of 1929.

The effect of such drastic reductions in values is first felt by the commodities which are being currently produced and, through these, the dollar value of production is diminished; consequently the national income of a country where most people are producers is reduced. Ultimately, a persistent decline of this character affects the capital values of real estate, buildings, machinery, etc., and its influence is then felt in a reduction in the national wealth as stated in dollars.

The first official estimate of national wealth issued by the Dominion Bureau of Statistics was for 1921, being based on the census data of that year. The national wealth was then placed at $22,195,000,000. Later estimates were $25,673,000,000 for 1925 and $27,668,000,000 for 1927. The estimates for 1921, 1925, and 1927 are not exactly comparable with those for 1929 and 1933 given below, but are sufficiently so for most purposes. The estimate for 1929 is $31,276,000,000, and the 1933 estimate $25,768,000,000. The former presents a picture at the peak of domestic prosperity, whereas that of 1933 reflects the writing down of values resulting from the depression. The 1933 estimate is the latest that has been published.

Wealth of Canada by Items, 1929 and 1933.—In the items showing the composition of the national wealth, as set out in Table **41**, care has been taken to exclude duplication. In any consideration of the individual items it should be remembered that each item covers only the portion of wealth which is stated in the description attached thereto. For instance, the item "Fisheries" includes only capital invested in primary operations. Capital invested in fish-canning and -curing establishments is included with "Manufactures", though this also might be considered as part of the wealth connected with "Fisheries". Similarly, the items for "Manufactures" do not include lands and buildings in urban centres which are shown under the heading "Urban Real Property".*

---

* A fuller explanation of the composition of the separate items is contained in the bulletin "Canada's National Wealth", obtainable from the Dominion Statistician.

41.—Estimate of the National Wealth of Canada, with Percentage and Per Capita Distribution of Component Items, 1929 and 1933.

NOTE.—For discussion of these items, see p. 871 of the 1933 Year Book and the bulletin referred to on p. 925.

Classification.	Aggregate Amounts.		Percentages of Totals.		Average Amounts per Head of Population.[1]	
	1929.	1933.	1929.	1933.	1929.	1933.
	$'000	$'000	p.c.	p.c.	$	$
Farm values (land, buildings, implements, machinery, and live stock)	6,308,353	4,760,844	20·17	18·48	629·01	445·73
Agricultural products in the possession of farmers and traders	1,631,124	802,946	5·22	3·11	162·64	75·17
Totals, Agricultural Wealth	7,939,477	5,563,790	25·39	21·59	791·65	520·90
Mines (capital employed)	867,021	800,292	2·77	3·10	86·45	74·93
Forests (estimated value of accessible raw materials, pulpwood, and capital invested in woods operations)	2,299,903	2,090,821	7·35	8·11	229·33	195·75
Fisheries (capital invested in boats, gear, etc., in primary operations)	33,935	25,380	0·11	0·10	3·38	2·38
Central electric stations (capital invested in lands and buildings other than office buildings and in equipment, materials, etc.)	1,003,070	1,309,801	3·21	5·08	100·02	122·63
Manufactures (machinery and tools, and estimate for capital in rural lands and buildings, duplication excluded)	1,421,430	949,721	4·55	3·69	141·73	88·92
Manufactures (materials on hand and stocks in process, duplication excluded)	837,805	368,070	2·68	1·43	83·54	34·46
Construction, custom and repair (estimate of capital invested in machinery and tools and materials on hand)	137,685	32,385	0·44	0·13	13·73	3·03
Trading establishments (estimate of the value of furniture and fixtures, equipment and materials on hand)	1,039,584	708,043	3·32	2·75	103·66	66·29
Steam railways (investment in road and equipment)	3,321,033	3,365,464	10·62	13·06	331·14	315·09
Electric railways (investment in road and equipment)	240,111	223,704	0·77	0·87	23·94	20·94
Telephones (cost of property and equipment)	291,589	330,491	0·93	1·28	29·07	30·94
Urban real property (assessed valuations and exempted property and estimate for undervaluation by assessors and for roads, sewers, etc.)	8,251,011	6,913,530	26·38	26·83	822·72	647·27
Canals (amounts expended on construction to Mar. 31, 1930 and 1934)	241,946	267,671	0·77	1·04	24·13	25·06
Harbours (approximate amounts expended to Mar. 31, 1930 and 1934)	405,346	502,264	1·30	1·95	40·42	47·02
Shipping (including aircraft)	150,827	135,506	0·48	0·53	15·04	12·69
Automobiles (estimate of the value of automobiles registered)	690,039	392,211	2·21	1·52	68·81	36·72
Highways, etc	532,972	689,333	1·70	2·68	53·14	64·54
Household furnishings, clothing, etc. (value estimated from production and trade statistics)	1,370,000	913,397	4·38	3·54	136·60	85·52
Specie, coin, and other currency held by the Government, chartered banks, and the general public	201,030	186,362	0·64	0·72	20·04	17·45
Grand Totals	**31,275,814**	**25,768,236**	**100·00**	**100·00**	**3,118·54**	**2,412·53**

---

[1] These averages are based on the estimates of population as given in Table 42, p. 927.

Aggregate and Per Capita Wealth, by Provinces, 1929 and 1933.—As regards the provincial distribution of wealth in 1933, Ontario ranked first with an estimated aggregate wealth of $8,796,000,000 or 34·14 p.c. of the total; Quebec second with $6,738,000,000 or 26·15 p.c.; Saskatchewan third with $2,527,000,000 or 9·81 p.c.; and British Columbia fourth with $2,431,000,000 or 9·43 p.c. of the whole.

While Ontario and Quebec led in absolute wealth, the western provinces came first in per capita wealth. British Columbia held first rank with a per capita wealth of $3,414, Alberta second with $2,721, and Saskatchewan third with $2,711. Ontario with a per capita wealth of $2,468 was fourth, Quebec was fifth with $2,269, and Manitoba sixth with $2,201. The per capita wealth for the whole Dominion was estimated at $2,413.

Further details, including figures for 1929, are shown in Table **42.** In 1929 the provinces held the same relative places, both as regards aggregate and per capita wealth.

42.—Provincial Distribution of the National Wealth of Canada, with Percentage and Per Capita Analyses, 1929 and 1933.

Note.—Figures for 1921 and 1925 are given on pp. 849–850 of the 1927–28 Year Book, and for 1927 on p. 870 of the 1931 Year Book.

Year and Province.	Estimated Wealth.	Percentage Distribution of Wealth.	Estimated Population, June 1.	Percentage Distribution of Population.	Wealth per Capita.
	$	p.c.	No.	p.c.	$
1929.					
Prince Edward Island	167,117,000	0·54	88,000	0·88	1,899
Nova Scotia	925,822,000	2·96	515,000	5·14	1,798
New Brunswick	855,511,000	2·74	404,000	4·03	2,118
Quebec	8,403,854,000	26·87	2,772,000	27·64	3,032
Ontario	10,655,562,000	34·07	3,334,000	33·24	3,196
Manitoba	1,979,141,000	6·33	677,000	6·75	2,923
Saskatchewan	3,088,281,000	9·87	883,000	8·80	3,497
Alberta	2,427,957,000	7·76	684,000	6·82	3,550
British Columbia	2,756,844,000	8·81	659,000	6·57	4,183
Yukon	15,725,000	0·05	4,000	0·04	[1]
Totals, 1929	**31,275,814,000**	**100·00**	**10,029,000**[2]	**100·00**[2]	**3,119**
1933.					
Prince Edward Island	138,699,000	0·54	89,000	0·83	1,558
Nova Scotia	790,290,000	3·07	522,000	4·89	1,514
New Brunswick	730,297,000	2·83	420,000	3·93	1,739
Quebec	6,738,181,000	26·15	2,970,000	27·81	2,269
Ontario	8,795,801,000	34·14	3,564,000	32·99	2,468
Manitoba	1,562,421,000	6·06	710,000	6·75	2,201
Saskatchewan	2,527,147,000	9·81	932,000	8·90	2,711
Alberta	2,035,576,000	7·90	748,000	7·09	2,721
British Columbia	2,430,890,000	9·43	712,000	6·67	3,414
Yukon	18,934,000	0·07	4,000	0·04	[1]
Totals, 1933	**25,768,236,000**	**100·00**	**10,681,000**[2]	**100·00**[2]	**2,413**

[1] As the statistics for Yukon are uncertain, the per capita estimate of wealth is not shown.
[2] Includes the population of the Northwest Territories: 9,000 in 1929 and 10,000 in 1933, 0·09 p.c. in both cases.

Analyses of Itemized Wealth, by Provinces, 1929 and 1933.—In Table 39 on pp. 882-883 of the 1936 Year Book detailed statistics of the wealth of each province by leading items are given. This information is not repeated in this edition.

Subsection 2.—National Income.

The subject of the national income is dealt with at pp. 889-896 of the 1938 Year Book, under the following headings: definition of national income, approaches to the measurement of national income, and income tax statistics as a measure of national income. The statistics shown under the latter heading have been transferred to Subsection 3 of Sec. 1 of this Chapter, where they appear under the general heading of War tax revenue. The subject of national income as a whole, and the revision of the method of estimation, are still undergoing investigation by the Bureau, as outlined on p. 891 of the 1938 Year Book. Statistics for the years 1933-34, based upon the Survey of Production, were given at p. 866 of the 1937 Year Book. These are the latest figures published on the old basis.

Subsection 3.—British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad.*

Revised estimates of British and foreign investments in Canada and Canadian investments in other countries were issued in 1938 by the Internal Trade Branch of the Dominion Bureau of Statistics. Because of the great variety of forms these investments take and the difficulties inherent in arriving at satisfactory valuations, along with the continual changes in ownership in some cases, these estimates should be considered as approximations rather than exact representations. They are, however, indicative of the general proportions of the investments involved. In using these statistics it should be recognized that changes in value from one year to another do not always reflect actual capital movements between Canada and other countries as there are important changes in the value of 'equity' investments arising from internal operations, such as reinvested profits, for instance, which are quite independent of external factors.

The present investigation has been carried back as far as 1926 and revised statistics of international investments are shown for the years 1926 and 1929 to 1937 in Tables **43** and **44**. Very marked changes have taken place in Canada's international indebtedness during the present century. The industrial expansion in Canada in the years preceding the Great War was closely related to the heavy inflow of capital from Great Britain. In 1914 the value of British investments in Canada was not much different from the value of British investments as shown in the accompanying tables in recent years, although slightly higher than in 1926. The rapid growth in United States investments in Canada took place after 1914. Part of this increase in the investments of the United States in Canada came after 1926 and is reflected in Table **43** which shows a change in these investments between 1926 and 1930 of from $3,161,200,000 to $4,298,400,000. This influx of capital followed two contrasting channels. A large part of the capital was raised through the sale of new issues in New York but the capital coming to Canada through the channel of direct investment was also especially heavy and this capital invested directly in Canada has given United States investments in Canada a particular character. Since 1930 there has been a reduction in the value of United States investments in Canada, as a result of the redemption of Canadian securities owned in the United States, changes in the values of equity investments in Canada, and other factors.

In Table **45** there is shown in detail the distribution in 1937 of British and foreign capital invested in Canada. The indebtedness of Canadian governments abroad amounted to $1,698,000,000 of which $514,200,000 represented government securities held by British investors and $1,180,600,000 government securities held by residents of the United States. The total non-resident investments in Canadian railways, $1,632,900,000, was about the same as the total government securities held abroad, but the British investments predominated in this group, being $1,065,600,000 compared with a United States investment of $538,500,000. In most other classes of investment the amounts owned in the United States were larger than the British although the latter were generally substantial.

In appraising Canada's international indebtedness, consideration must also be given to Canadian investments abroad. These have grown from $1,352,800,000 in 1926 to $1,757,900,000 in 1937. The principal growth was in Canadian portfolio holdings of United States securities although considerable amounts of the securities of Latin American and European governments were also acquired in the earlier part of the period. The increase in the holdings of these miscellaneous investments in other countries has been greater than the increase in total Canadian investments abroad, as there has been a very marked reduction in the net assets of the Canadian banks in other countries during this period.

---

* Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics. The subject is treated more fully in the bulletins "British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad, 1926-36", "Canadian Balance of International Payments—A Study of Methods and Results" and recent reports on direct investments, obtainable from the Dominion Statistician. For a list of the publications of this Branch, see Chapter XXIX.

For 1937, Canadian capital in other countries is estimated at $1,757,900,000. The largest part of this, about $1,097,600,000, was invested in the United States and was principally in the form of direct investments in railways and branch and subsidiary plants and in portfolio investments in the stocks and bonds of United States governments and corporations. Investments in other countries include a miscellaneous item of $382,000,000 representing an estimate of Canadian holdings of other foreign securities such as the bonds of Latin American and European governments. Direct investments in other countries, largely in the British West Indies and Latin America, amounted to $169,600,000.

Of further interest, in considering the relative importance of Canada's international indebtedness in the nation's economic life, is the place Canadian capital occupies in the total amount of capital invested in Canada. It is estimated that the amount of capital invested in Canada is about $18,000,000,000. This sum includes the bonded indebtedness of Dominion, provincial, and municipal governments, investments in railways, all manufacturing concerns, mines and metal industries, public utilities, trading establishments, finance, insurance, land, and mortgages. It does not include private capital in domestic enterprises such as farms, homes, etc. Of this sum, it is estimated that 62 p.c., or over $11,000,000,000, is owned in Canada; about 22 p.c., or $3,932,400,000, in the United States; 15 p.c., or $2,684,800,000, in the United Kingdom; and less than 1 p.c., or $147,800,000, in other countries.

Investments of Canadian Insurance Companies Operating Abroad.—An important change in the revised figures shown in Tables **43** to **46** is the omission of an item previously included, *viz.*, "Investments of Canadian Insurance Companies Operating in Other Countries". These insurance investments, so-called, are not investments of quite the same character as the other items. The large assets in other countries held by Canadian insurance branches in those countries have against them, besides ordinary liabilities, the fiduciary interest of the policyholders. In fact when the prospective claims of policyholders are considered it appears that, on balance, there is a small net investment of these branches in Canada rather than a Canadian investment abroad. This is possible because the assets underlying the reserve funds need not all be held abroad. On the other hand, the fact that assets can be transferred between countries gives an importance to them as a factor in capital movements. Again, British and foreign securities held by Canadian companies in Canada have already been included as Canadian investments abroad. On account of the ambiguity of this item and the fact that it has already been included in another form, it has not been repeated in the tables.

With regard to British and foreign insurance investments in Canada, since there exist net assets in Canada over all liabilities including reserves against future claims of Canadian policyholders the residual amount is shown as a bona fide investment in Canada in Tables **43** and **45**.

43.—Estimated British and Foreign Capital Invested in Canada, Classified According to Main Types, as at Dec. 31, 1926, and 1929-37.

NOTE.—Net equities of policyholders, etc., outside of Canada invested in Canada through Canadian insurance companies operating abroad are not shown in this table for the reason given in the text on p. 929. The omission does not materially affect the totals. Statistics for 1927-28 are shown at p. 898 of the 1938 Year Book.

Type of Investment.	1926.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000
Government Securities—										
Dominion	632·0	571·6	675·0	627·4	680·3	741·9	749·4	807·3	806·3	863·7
Provincial	419·7	520·8	590·2	604·2	606·6	570·0	554·9	530·8	518·7	495·3
Municipal	372·1	400·3	429·5	437·2	406·6	392·4	389·4	379·6	363·7	339·0
	1,423·8	1,492·7	1,694·7	1,668·8	1,693·5	1,704·3	1,693·7	1,717·7	1,688·7	1,698·0
Public Utilities—										
Railways	1,573·4	1,771·0	1,835·1	1,896·3	1,874·2	1,859·2	1,825·6	1,683·0	1,633·5	1,632·9
Other (traction, light, heat, power, telephone, etc.)	466·3	620·0	660·8	698·5	736·1	751·9	766·7	780·0	762·4	738·0
Manufacturing—										
Wood and paper products	473·6	567·0	596·0	525·5	484·2	458·4	453·6	462·0	465·0	453·0
Metal industries	396·3	502·6	501·7	456·8	413·3	401·5	413·8	423·0	428·0	411·0
All other manufacturing industries	451·4	546·1	521·3	495·8	460·2	459·1	475·8	494·0	500·0	487·0
Mining	288·0	363·0	376·0	355·0	333·0	335·0	350·0	326·0	340·0	357·0
Merchandising and service	235·4	255·8	251·5	237·5	225·8	219·4	222·0	226·8	225·0	222·0
Insurance	93·8	104·6	142·5	151·7	160·5	161·7	198·9	220·0	210·0	194·4
Finance and mortgage corporations	228·7	322·9	321·3	293·9	286·4	283·4	285·0	290·0	295·0	296·7
Miscellaneous (agricultural lands, summer homes, prospecting, assets administered for persons or corporations residing outside Canada, etc.)	260·0	290·0	295·0	288·0	287·0	280·0	280·0	275·0	275·0	275·0
Grand Totals (Great Britain, United States and Other Countries)	**5,890·7**	**6,835·7**	**7,195·9**	**7,067·8**	**6,954·2**	**6,913·9**	**6,965·1**	**6,897·5**	**6,822·6**	**6,765·0**
Totals, British Capital	2,597·8	2,764·2	2,766·0	2,687·1	2,631·7	2,674·4	2,729·5	2,729·3	2,718·9	2,684·8
Totals, United States Capital	3,161·2	3,926·5	4,298·4	4,254·5	4,198·3	4,115·2	4,112·1	4,044·6	3,974·0	3,932·4
Totals, Capital of Other Countries	131·7	145·0	131·5	126·2	124·2	124·3	123·5	123·6	129·7	147·8

44.—Estimated Canadian Investments Abroad as at Dec. 31, 1926, and 1929-37.

NOTE.—Investments held abroad by Canadian insurance companies operating in other countries are not shown in this table for the reason given on p. 929. The omission in its net effect does not materially affect the totals. Statistics for 1927-28 will be found at p. 899 of the 1938 Year Book.

Type of Investment.	1926.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000	$ '000,000
Canadian Government credits	36·1	30·9	30·7	30·5	30·5	30·5	30·5	30·5	30·5	30·9
Net assets of Canadian banks outside Canada	370·3	179·8	180·2	152·5	114·8	90·9	109·7	109·6	107·0	120·0
Foreign securities held in Canada by Canadian insurance companies	91·4	184·6	156·7	154·5	144·2	136·8	142·2	162·8	183·0	199·3
Direct investments	397·0	423·5	443·0	445·0	446·0	447·0	449·0	453·0	497·8	510·7
Miscellaneous investments	458·0	810·0	842·0	856·0	853·0	865·0	874·0	884·0	894·0	897·0
Grand Totals	**1,352·8**	**1,628·8**	**1,652·6**	**1,638·5**	**1,588·5**	**1,570·2**	**1,605·4**	**1,639·9**	**1,712·3**	**1,757·9**
Totals, Capital Invested in the United Kingdom	59·6	50·6	67·7	50·6	44·7	49·0	47·4	50·8	49·8	40·9
Totals, Capital Invested in the United States	778·0	929·8	933·1	928·8	906·1	875·7	921·1	963·4	1,049·1	1,097·6
Totals, Capital Invested in Other Countries	515·2	648·4	651·8	659·1	637·7	645·5	636·9	625·7	613·4	619·4

45.—Estimated British and Foreign Capital Invested in Canada as at Dec. 31, 1937.

NOTE.—Net equities of policyholders, etc., outside of Canada invested in Canada through Canadian insurance companies operating abroad are not shown in this table for the reason given on p. 929. The omission does not materially affect the totals.

Type of Investment.	Invested by Residents of—			Total.
	United Kingdom.	United States.	Other Countries.	
	$'000,000	$'000,000	$'000,000	$'000,000
Government Securities—				
Dominion	317·1	546·6	[1]	863·7
Provincial	61·3	430·8	3·2	495·3
Municipal	135·8	203·2	[1]	339·0
Public Utilities—				
Railways	1,065·6	538·5	28·8	1,632·9
Other (traction, light, heat, power, telephone, etc.)	176·0	553·0	9·0	738·0
Manufacturing—				
Wood and paper products	97·0	354·0	2·0	453·0
Metal industries	72·0	334·0	5·0	411·0
All other manufacturing industries	201·0	277·0	9·0	487·0
Mining	90·0	257·0	10·0	357·0
Merchandising and service	73·0	145·0	4·0	222·0
Insurance	85·2	104·9	4·3	194·4
Finance and mortgage corporations	150·8	103·4	42·5	296·7
Miscellaneous (agricultural lands, summer homes, prospecting, assets administered for persons or corporations residing outside Canada, etc.)	160·0	85·0	30·0	275·0
Grand Totals	**2,684·8**	**3,932·4**	**147·8**[1]	**6,765·0**

[1] Some indeterminate parts of the amounts shown as owned in the United Kingdom and possibly some shown as owned in the United States are owned by residents of other countries.

46.—Estimated Canadian Investments Abroad as at Dec. 31, 1937.

NOTE.—Investments held abroad by Canadian insurance companies operating in other countries are not shown in this table for the reason given on p. 929. The omission in its net effect does not materially affect the totals.

Type of Investment.	Canadian Investments in—			Total.
	United Kingdom.	United States.	Other Countries.	
	$'000,000	$'000,000	$'000,000	$'000,000
Canadian Government credits	Nil	Nil	30·9	30·9
Net assets of Canadian banks held outside Canada	10·1	101·5	8·4	120·0
Foreign securities held in Canada by Canadian insurance companies	9·6	161·2	28·5	199·3
Direct investments	13·2	327·9	169·6	510·7
Miscellaneous investments	8·0	507·0	382·0	897·0
Grand Totals	**40·9**	**1,097·6**	**619·4**	**1,757·9**

CHAPTER XXII.—CURRENCY AND BANKING; MISCELLANEOUS COMMERCIAL FINANCE.

In this chapter are assembled the statistics regarding financial institutions and transactions, other than those pertaining to insurance which are dealt with separately in Chapter XXIII. The important subject of currency and banking is treated in Part I of the chapter, while trust and loan companies, sales of Canadian bonds, corporation dividends, and foreign exchange, constitute sections of the miscellaneous commercial finance covered in Part II.

PART I.—CURRENCY AND BANKING.

Section 1.—Historical Sketch.

At pp. 900-905, inclusive, of the 1938 Year Book there appears a historical sketch of currency and banking in Canada which is not repeated in this edition. Certain features of a central banking system were there traced which finally led up to the establishment of the Bank of Canada. In chronological order these were:—

1.—*Central Note Issue,* permanently established with the issue of Dominion notes under legislation of 1868.

2.—*The Canadian Bankers' Association,* established in 1900, and designed to effect greater co-operation among the banks in the issue of notes, in credit control, and in various aspects of bank activities.

3.—*The Central Gold Reserves,* established by the Bank Act of 1913.

4.—*Re-discount Facilities,* although originated as a War measure by the Finance Act of 1914, were made a permanent feature of the system by the Finance Act of 1923, which empowered the Minister of Finance to issue Dominion notes to the banks on the deposit by them of approved securities. This legislation provided the banks with a means of increasing their legal tender cash reserves at will.

Section 2.—The Bank of Canada.

Subsection 1.—The Bank of Canada Act and its Amendments.

C. 43 of the Statutes of 1934, "An Act to incorporate the Bank of Canada", provided for the establishment of a central bank in Canada. The capital of the Bank was originally $5,000,000, divided into shares of $50 par value. These shares were offered for public subscription by the Minister of Finance on Sept. 17, 1934, and were largely oversubscribed. The maximum allotment to any one individual or corporation was 15 shares. Shares of the Bank could be held only by British subjects ordinarily resident in Canada, or by corporations controlled by British subjects ordinarily resident in Canada. The maximum holding permitted one person was 50 shares. The Bank commenced business on Mar. 11, 1935.

By an amendment to the Act, passed at the 1936 session of Parliament, the capitalization of the Bank was increased to $10,100,000 by the sale of $5,100,000 Class "B" shares to the Minister of Finance; the original shareholders were designated Class "A".

The Bank of Canada Act was further amended in 1938 (c. 42 of the Statutes of 1938). By this legislation the capital of the Bank was reduced from $10,100,000 to $5,000,000 divided into 100,000 shares of the par value of $50 each to be exchanged for the Class "B" shares held by the Minister of Finance which were to be cancelled by the Bank of Canada. All "A" shares, held by the public, were purchased for the sum of $59·20 each, plus accrued dividends, and these certificates were also cancelled. This legislation, therefore, brought the Bank of Canada under complete government ownership. Due to changes in constitution and ownership, adjustments in the method of appointing directors as well as in other directions were made.

The Bank is authorized to pay cumulative dividends of 4½ p.c. per annum from its profits after making such provision as the Board thinks proper for bad and doubtful debts, depreciation in assets, pension funds, and all such matters as are properly provided for by banks. The remainder of the profits will be paid into the Consolidated Revenue Fund of Canada and to the Rest Fund of the Bank in specified proportions until the Rest Fund is equal to the paid-up capital, when all the remaining profits will be paid into the Consolidated Revenue Fund.

The Bank may buy and sell securities of the Dominion and the provinces without restriction if of a maturity not exceeding two years, and in limited amounts if of longer maturity: short-term securities of the Dominion or provinces may be re-discounted. It may also buy and sell short-term securities of British Dominions, the United States, or France without restriction, if maturing within six months, and such securities having a maturity exceeding six months in limited amounts. The Bank may buy and sell certain classes of commercial paper of limited currency, and, if endorsed by a chartered bank, may re-discount such commercial paper. Advances for six-month periods may be made to chartered banks, Quebec Savings Banks, the Dominion, or any province against certain classes of collateral, and advances of specified duration may be made to the Dominion or any province in amounts not exceeding a fixed proportion of such government's revenue. The Bank may accept from the Dominion or Provincial Governments or from any chartered bank or any bank incorporated under the Quebec Savings Bank's Act, deposits which shall not bear interest. The Bank may buy and sell gold, silver, nickel, and bronze coin, and gold and silver bullion, and may deal in foreign exchange.

The provisions regarding the note issue of the Bank of Canada are dealt with on p. 938.

The Bank of Canada must maintain a reserve of gold equal to not less than 25 p.c. of its total note and deposit liabilities in Canada. The reserve, in addition to gold, may include silver bullion, balances in pounds sterling in the Bank of England, in United States dollars in the Federal Reserve Bank of New York, and in gold currencies in central banks in gold standard countries or in the Bank for International Settlements; treasury bills of the United Kingdom or the United States of America having a maturity not exceeding three months; and bills of exchange having a maturity not exceeding 90 days, payable in London or New York, or in a gold standard country, less any liabilities of the Bank payable in the currency of the United Kingdom, the United States of America, or a gold standard country.

The chartered banks are required to maintain a reserve of not less than 5p.c. of their deposit liabilities payable in Canadian dollars in the form of deposits with and notes of the Bank of Canada.

The Bank acts as the fiscal agent of the Dominion of Canada without charge and may, by agreement, act as banker or fiscal agent of any province. The Bank does not accept deposits from individuals and does not compete with the chartered banks in commercial banking fields.

The head office of the Bank is at Ottawa, and it has an agency in each province, namely, at Charlottetown, Halifax, Saint John, Montreal, Toronto, Winnipeg, Regina, Calgary, and Vancouver.

The Governor of the Bank is its chief executive officer and Chairman of the Board of Directors, and he is assisted by a Deputy Governor and an Assistant Deputy Governor. The first appointments were made by the Government. Subsequent appointments are to be made by the Board of Directors subject to the approval of the Governor in Council.

At the first meeting of the shareholders on Jan. 23, 1935, seven directors were elected by the shareholders for terms to run as follows: one until the third annual general meeting (1938), two until the fourth (1939), two until the fifth (1940), and two until the sixth annual general meeting (1941). Directors are now appointed by the Minister of Finance with the approval of the Governor in Council for terms of three years. There are now eleven directors. Former directors continued in office when the Government took over the management of the Bank. In the transaction of the business of the Bank each director has one vote.

There is also an Executive Committee of the Board of Directors consisting of the Governor, Deputy Governor, and one member of the Board, which must meet once a week. This Committee has the same powers as the Board but every decision is submitted to the Board of Directors at its next meeting. The Board must meet at least four times a year. The Deputy Minister of Finance is an *ex officio* member of the Board of Directors and of the Executive Committee, but is without a vote.

The Governor, or in his absence the Deputy Governor only, has the power to veto any action or decision of the Board of Directors or the Executive Committee, subject to confirmation or disallowance by the Governor in Council.

Subsection 2.—The Bank of Canada and Its Relationship to the Canadian Financial System.

An article under this title is given at pp. 881-885 of the 1937 edition of the Year Book. It deals with such subjects as the functions of the Bank, its control and regulation of credit and currency, the mechanism by which such control is exercised, the expansion and contraction of credit, the mitigation of general economic fluctuations, the control of exchange operations, the advisory function of the Bank, and its duties as the Government's banker.

Subsection 3.—Bank of Canada Operations.

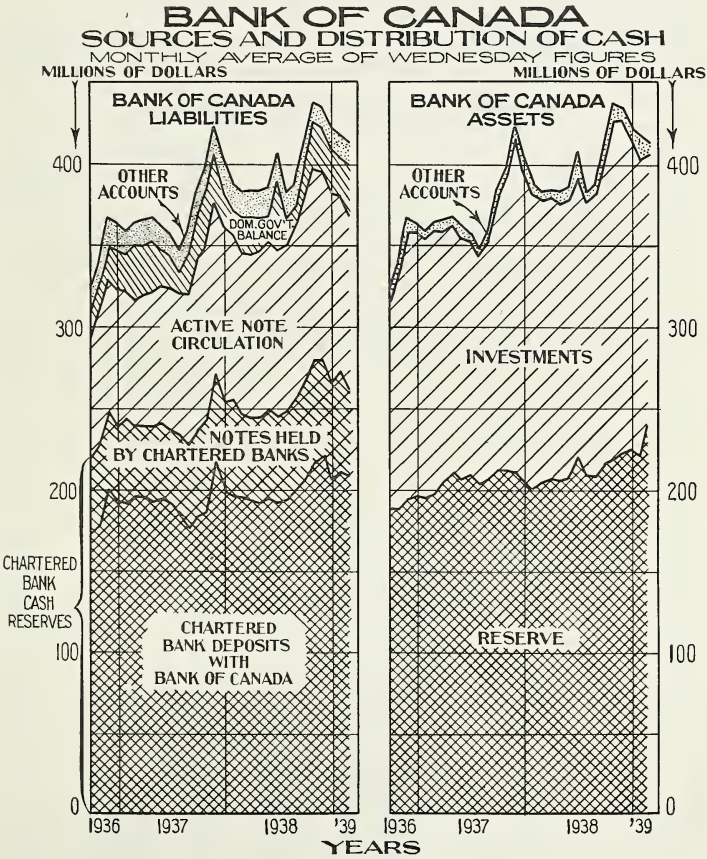
The operations of the Bank of Canada, as shown by the liabilities and assets statement as at Mar. 13, 1935, and Dec. 31, 1936-38, are shown in Table **1.**

1.—Liabilities and Assets of the Bank of Canada, Mar. 13, 1935, and Dec. 31, 1936-38.

Item.	Mar. 13, 1935.	Dec. 31, 1936.[1]	Dec. 31, 1937.[1]	Dec. 31, 1938.[1]
	$	$	$	$
Liabilities.				
Capital paid up	5,000,000	10,100,000	10,100,000	5,000,000
Rest fund	173,092	743,716	1,348,414	1,903,515
Notes in circulation	99,677,229	135,735,458	165,330,405	175,259,573
Deposits—				
Dominion Government	*18,262,844*	*19,917,329*	*12,292,382*	*17,783,300*
Chartered banks	*181,636,034*	*186,973,785*	*196,039,737*	*200,645,826*
Other	*766,255*	*2,059,627*	*3,456,935*	*3,086,373*
Totals, Deposits	200,665,133	208,950,741	211,789,054	221,515,499
Dividends declared	113,000	182,793	228,260	85,000
Other liabilities	2,026,698	1,273,197	1,634,083	1,172,015
Totals, Liabilities	**307,655,152**	**356,985,905**	**390,430,216**	**404,935,602**
Assets.				
Reserves (at Market Values)—				
Gold coin and bullion	180,509,343	179,376,816	179,763,762	185,912,017
Silver bullion	1,638,366	2,257,032	2,992,623	Nil
Sterling and U.S.A. dollars	4,223,101	9,125,401	14,884,810	28,354,420
Other currencies, of countries on a gold standard	9,215	Nil	382	2,005
Totals, Reserves	186,380,025	190,759,248	197,641,578	214,268,442
Subsidiary coin	128,778	143,116	42,989	220,152
Advances to Dominion Government	3,465,813	Nil	Nil	Nil
Investments (at Not Exceeding Market Values)—				
Dominion and Provincial Government short-term securities	*30,873,169*	*61,299,024*	*82,343,729*	*144,620,866*
Other Dominion and Provincial Government securities	*83,409,675*	*99,016,390*	*91,564,710*	*40,894,976*
Other securities	*Nil*	*Nil*	*12,212,437*	*Nil*
Totals, Investments	114,282,844	160,315,414	186,120,876	185,515,842
Bank premises	111,911	350,719	1,167,563	1,647,580
All other assets	3,285,780	5,417,408	5,457,210	3,283,586
Totals, Assets	**307,655,152**	**356,985,905**	**390,430,216**	**404,935,602**

[1] From the Bank's Annual Statement.

The chart given below showing Bank of Canada liabilities and assets covering the short period since September, 1936, illustrates the relationship between the central bank's balance sheet and chartered bank cash reserves. The expansion of Bank of Canada liabilities and assets has provided for increased Bank of Canada notes in active circulation, as the chartered bank-note issue is limited and is gradually being retired under Bank Act regulations, and has somewhat enlarged the cash reserves of the chartered banks. The principal change in Bank of Canada assets since September, 1936, has been the rise in investments, variations in which have been due in part to seasonal variations in cash reserves and active note circulation.



Reproduced from the Bank of Canada's "Statistical Summary" March, 1939.

Section 3.—Currency.

Subsection 1.—Canadian Coinage.

The present standard of Canada is gold of 900 millesimal fineness (23·22 grains equal to one dollar). Under the Uniform Currency Act of 1871, gold coin has been authorized but only very limited issues were ever made. The British sovereign and half sovereign, and United States eagle, half eagle, and double eagle are legal tender. Sudsidiary coin consists of 50, 25, and 10 cent silver pieces,* 800 fine (reduced from 925 fine in 1920). Such subsidiary silver coin is legal tender to the amount of ten dollars. The 5-cent piece (now made of nickel) is legal tender up to five dollars and the 1-cent bronze coin up to twenty-five cents. There is no provision for the redemption of subsidiary coin. Table **2** gives statistics of Canadian coinage, and Table **3** shows the coins in circulation at the end of each year from 1926 to 1938.

---

* The Currency Act of 1910 made provision for a silver dollar and a 5-cent silver coin. The former was not coined until 1935, when a limited issue was made as a jubilee coin. The 5-cent silver coin was coined freely until 1921. It still has limited legal tender but has been replaced in the coinage by the 5-cent nickel piece.

2.—Particulars of Canadian Coinages Current in 1939.

Coin.	Thickness of Blank.	Diameter of Coin.		Fineness.	Legal Weight.			Legal Remedy— Of Weight.		Legal Remedy— Of Fineness.	Amount for which Legal Tender.
	in.	in.	mm.	1,000 ths.	grns.	oz.	grams.	grns.	grams.	1,000ths.	$
Gold—											
$10	·068	1·060	26·92	900	258	·5375	16·72	·4	·026	1	any amount.
$ 5	·053	·850	21·59	900	129	·26875	8·36	·25	·016	1	
Silver—											
$ 1	·09375	1·40	35·56	800	360	·75	23·33	1·50	·097	6	10·00
50c	·064	1·170	29·72	800	180	·375	11·66	1·50	·097	6	10·00
25c	·051	·930	23·62	800	90	·1875	5·83	1·00	·065	6	10·00
10c	·035	·705	17·91	800	36	·075	2·33	per 10 pieces. 3·00	·194	6	10·00
Nickel—											
5c	·055 to ·057	·835	21·21	1,000	70	lb.av. ·01	4·54	per lb. of 100 pieces. 100·00	6·480	15	5·00
Bronze—											
1c	·0495	·750	19·05	Cu. 955· Sn. 30· Zn. 15·	50	·007	3·24	per lb. of 140 pieces. 140·00	9·072	–	0·25

3.—Circulation of Canadian Coin as at Dec. 31, 1926-38.

Note.—Net issues of coin since 1858.

Date.	Silver.	Nickel.[1]	Bronze.	Total.	Per Capita.
	$	$	$	$	$
Dec. 31—					
1926	27,433,463	564,865	2,043,833	30,042,161	3·18
1927	27,104,534	813,784	2,080,196	29,998,514	3·11
1928	27,737,963	1,063,627	2,171,657	30,973,247	3·15
1929	28,638,195	1,330,498	2,290,789	32,259,482	3·22
1930	28,562,330	1,494,525	2,297,405	32,354,260	3·17
1931	28,706,348	1,775,139	2,346,054	32,827,541	3·16
1932	28,853,740	1,939,923	2,558,962	33,352,625	3·17
1933	28,530,340	2,064,054	2,678,302	33,272,696	3·12
1934	28,702,640	2,256,268	2,745,296	33,704,204	3·11
1935	28,407,168	2,449,278	2,818,341	33,674,787	3·08
1936	28,442,074	2,650,891	2,904,288	33,997,253	3·08
1937	29,387,857	2,899,361	3,003,286	35,290,504	3·17
1938	30,482,924	3,051,594	3,091,873	36,626,391	3·27

[1] Nickel coins were first issued in 1922.

The Royal Canadian Mint. The Ottawa Mint was established as a branch of the Royal Mint under the (Imperial) Coinage Act, 1870, and opened on Jan. 2, 1908. By 21-22 Geo. V, c. 48, it was constituted a branch of the Department of Finance, and by the Proclamation of Nov. 14, 1931, issued under Sec. 3 of that Act, it has, since Dec. 1, 1931, operated as the Royal Canadian Mint. At first the British North American provinces, and later the Dominion of Canada, obtained their coins from the Royal Mint in London or from The Mint, Birmingham, Ltd., and in its earlier years the operations of the Mint in Canada were confined to the production of gold, silver, and bronze coins for domestic circulation, of British sovereigns, and of small coins struck under contract for Newfoundland and Jamaica. Previous to 1914 small quantities of gold bullion were refined, but during the War the Mint came to the assistance of the British Government by establishing a refinery in which nearly twenty million ounces of South African gold were treated on account of the Bank of England, and the subsequent great development of the gold-mining industry in Canada has resulted in gold-refining becoming one of the principal activities of the Mint. Gold coins have not been struck since 1919, most of the fine gold produced from the rough shipments from the mines being delivered to the Department of Finance (since Mar. 11, 1935, the Bank of Canada has acted as agent for the Government) in the form of bars of approximately 400 fine oz. each, the rest being sold in a convenient form to manufacturers. The fine silver extracted from the rough gold, when not required for coinage, is sold in New York or disposed of to local manufacturing firms.

4.—Annual Receipts of Gold Bullion at the Ottawa Mint, and Bullion and Coinage Issued, calendar years 1926-38.

Calendar Year.	Gold Received.	Gold Bullion Issued.	Silver Coin Issued.	Nickel Coin Issued.	Bronze Coin Issued.
	fine oz.	fine oz.	$	$	$
1926	1,375,502	1,347,668	50,000	168,500	28,200
1927	1,448,180	1,451,907	574,000	249,000	37,500
1928	1,325,113	1,305,200	867,000	250,000	92,100
1929	438,351	468,384	1,081,000	267,000	123,300
1930	862,075	722,469	326,000	164,500	13,400
1931	1,721,237	1,735,112	475,400	281,000	51,400
1932	2,829,529	2,873,221	287,000	165,000	213,200
1933	2,568,838	2,589,649	155,000	125,000	120,800
1934	3,008,977	3,038,019	172,300	193,000	69,900
1935	3,158,780	3,177,401	601,020	194,000	75,100
1936	3,603,335	3,625,549	809,200	202,600	87,200
1937	3,933,453	3,937,910	1,322,200	251,100	105,400
1938	4,398,258	4,308,067	1,376,000	153,500	184,300

Subsection 2.—Dominion and Bank of Canada Notes.

Dominion Notes.—It is explained in the historical outline referred to at the beginning of this chapter that Dominion notes became established in 1868. The legislation by which the issue was expanded with the growth of the country is given in a footnote on p. 952 of the 1934-35 Year Book.

Prior to the taking over of the note issue by the Bank of Canada when it opened on Mar. 11, 1935, Dominion notes were issued under any one of three statutory authorities: (1) the Dominion Notes Act (Statutes of 1934, c. 34), which required a gold reserve of 25 p.c. to be held against the first $120,000,000 of notes issued and full gold coverage against any issue in excess of $120,000,000; (2) the Finance Act (R.S.C. 1927, c. 70), Part II of which authorized the Minister of Finance to advance to any chartered bank or to the savings banks of Quebec, Dominion notes to any amount on the pledge of approved securities deposited with the Minister—these advances bore interest and no gold coverage was required to be held on Dominion notes so advanced; (3) c. 4 of the Statutes of 1915, authorizing the Government to issue Dominion notes to the amount of $26,000,000 without gold coverage, but partly covered by the deposit of $16,000,000 of railway securities guaranteed by the Dominion Government.

The Dominion note issue was therefore partly gold-backed and partly fiduciary. Dominion notes were legal tender and, in normal times when Canada was on the gold standard, they were redeemable in gold.

Dominion notes were of two types, those for the purpose of general circulation, and 'special' notes. The latter were used only by the banks for inter-bank transactions and clearings, or for cash reserves or deposit in the Central Gold Reserves. They were mainly of $5,000 and $50,000 denominations. Dominion notes for the purpose of general circulation were of the denominations of 25 cents, $1, $2, $4, $5, $50, $500, and $1,000, although for a considerable time no $4 or $50 notes had been issued. Since the minimum denomination for chartered bank notes was set at $5, Dominion notes of lower denominations naturally were largely in circulation among the general public, but there was nothing to prevent any of these Dominion notes from being included in the reserves of the banks, and it was provided that at least 40 p.c. of the banks' reserves were to consist of Dominion notes.

Bank of Canada Notes.—The Bank of Canada, when it commenced operations, assumed the liability for Dominion notes outstanding, which were replaced in public circulation, and partly replaced as cash reserves, by its own legal-tender notes in denominations of $1, $2, $5, $10, $20, $50, $100, and $1,000. Deposits of chartered banks at the Bank of Canada completed the replacement of Dominion notes as cash reserves.

The chartered banks are required under the Bank Act of 1934 to reduce the issue of their own bank notes gradually during the years 1935-45 to an amount not in excess of 25 p.c. of their paid-up capital on Mar. 11, 1935. Bank of Canada notes are thus replacing chartered bank notes as the issue of the latter is reduced.

In Table **5** are shown the denominations of Dominion or Bank of Canada notes in circulation in 1926, 1929, 1932, and in the three latest years. In the denominations under $5, which have, for many years, been used for general circulation, there has been little change. In the denominations from $5 to $1,000, where Bank of Canada notes have partially replaced chartered bank notes or Dominion notes, there has been a large increase. On the other hand, the special Dominion notes in denominations from $1,000 to $50,000 which were used almost exclusively for inter-bank transactions or bank reserves, are no longer in use.

5.—Denominations of Dominion or Bank of Canada Notes in Circulation, 1926, 1929, 1932, and 1936-38.

Note.—Annual averages of month-end figures.

Denomination.	1926.	1929.	1932.	1936.	1937.	1938.
	$	$	$	$	$	$
Provincial......	27,624	27,621	27,594	27,583	27,581	27,578
Fractional......	1,330,663	1,380,710	1,287,544	1,173,630	1,142,455	1,123,738
$ 1..........	17,732,100	20,032,308	18,957,935	21,896,929	23,048,042	23,716,228
2..........	12,925,212	14,609,088	13,346,323	14,994,532	15,662,722	15,900,985
4..........	33,397	32,138	31,004	29,608	29,444	29,334
Totals....	32,048,996	36,081,865	33,650,400	38,122,282	39,910,244	40,797,863
$ 5..........	626,179	730,101	5,137,627	14,264,286	21,415,392	24,005,936
10..........	Nil	Nil	Nil	23,517,545	37,914,727	45,738,944
20..........	"	"	"	7,962,389	15,328,494	19,849,718
25..........	"	"	"	93,839	73,433	63,390
50..........	650	650	650	2,801,183	4,588,100	5,591,283
100..........	Nil	Nil	Nil	3,671,616	5,813,192	8,056,675
500..........	1,875,917	1,811,875	2,530,833	2,416,917	1,981,542	1,411,500
1,000..........	3,799,250	4,168,917	6,437,583	12,414,166	14,017,333	15,610,750
Totals....	6,301,996	6,711,543	14,106,693	67,141,941	101,132,213	120,328,196
Specials—						
$ 1,000.......	671,333	407,667	3,500	1,000	1,000	1,000
5,000.......	16,307,500	7,209,583	8,063,750	10,000	10,000	10,000
50,000.......	134,675,000	153,970,834	110,054,167	Nil	Nil	Nil
Totals, Specials.	151,653,833	161,588,084	118,121,417	11,000	11,000	11,000
Grand Totals..	**190,004,825**	**204,381,492**	**165,878,510**	**105,275,223**	**141,053,457**	**161,137,059**

Subsection 3.—Chartered Bank Notes.

By reference to the historical outline referred to at the beginning of this chapter, the developments may be traced by which bank notes became the chief circulating medium in Canada in the period preceding the establishment of the Bank of Canada. The main steps of this development which remained as permanent features of the system are assembled and emphasized here. By the Bank Act of 1870 (later consolidated with the general Bank Act of 1871), the note issue of a bank was not to exceed its paid-up capital, no bank notes were to be issued under $4 in value (later changed to $5 and multiples thereof), and, while the banks were allowed to use their own discretion regarding the amount of their cash reserves, it was stipulated that at least one-third (later increased to 40 p.c.) of such cash reserves as they chose to carry should consist of Dominion notes. In the revision of 1880, a note-holder was definitely recognized as a preferred creditor. The Bank Act of 1890 provided for the Bank Note Circulation Redemption Fund, made up by each bank depositing with the Minister of Finance an amount equal to 5 p.c. of its note circulation. As a result of the operation of this fund and of making notes a prior lien against the assets of failed banks, no bank-note holder in Canada has suffered a loss since 1881. In 1908, after the financial crisis of 1907, provision was made for the banks to issue, during the crop-moving season, October to January, inclusive (later extended to September to February, inclusive), an excess circulation up to 15 p.c. of their combined capital and 'rest' or reserve funds, such excess to be taxed at a rate not exceeding 5 p.c. per annum. The revision of the Bank Act in 1913 provided for the establishment of Central Gold Reserves in which banks might deposit gold or Dominion notes and issue additional notes of their own there-against. The Finance Act (c. 3) of 1914, gave the Minister of Finance authority to issue Dominion notes to the banks against approved securities deposited with him. Originally passed as a War measure, this was made a permanent feature of the system by the Finance Act (c. 48) of 1923, and provided the banks with the means of further expanding their note issue by the deposit of the Dominion notes, so obtained, in the Central Gold Reserves.

Bank notes, although forming the chief circulating medium in the hands of the public, were a fiduciary issue; they were not legal tender but were convertible into Dominion notes which were legal tender.

The provisions regarding bank notes were materially changed with the establishment of the Bank of Canada under the Bank Act (c. 24) of 1934. The authority both for seasonal expansion and for additional issue secured by deposit in the Central Gold Reserves was then terminated. Provision was made for a gradual reduction in bank-note circulation over a period of years as explained on p. 938. As a result of these changes, current data on bank-note circulation are not comparable with those of earlier years. However, statistics of total notes in the hands of the general public are comparable. This public circulation includes chartered bank notes together with Dominion notes and Bank of Canada notes, exclusive of those held by the banks as reserves. Statistics on this basis are shown in Table **6**.

6.—Note Circulation in the Hands of the Public, 1926-38.

Year.	Averages of Month-End Figures.			Averages of Daily Figures of Total.	
	Chartered Bank.[1]	Dominion or Bank of Canada.[2]	Total.	Amount.[3]	Per Capita.[4]
	$	$	$	$'000,000	$
1926	168,885,995	26,314,706	195,200,701	195	20·63
1927	172,100,763	27,793,500	199,894,263	198	20·55
1928	176,716,979	28,803,340	205,520,319	204	20·74
1929	178,291,030	30,003,870	208,294,900	205	20·44
1930	159,341,085	28,812,059	188,153,144	185	18·12
1931	141,969,350	28,572,011	170,541,361	167	16·09
1932	132,165,942	28,483,686	160,649,628	158	15·04
1933	130,362,488	29,066,051	159,428,539	157	14·70
1934	135,537,793	30,547,720	166,085,513	163	15·06
1935	125,644,102	47,288,651	172,932,753	169	15·45
1936	119,507,306	66,934,958	186,442.264	182	16·50
1937	110,259,134	94,876,384	205,135,518	200	17·99
1938	99,870,493	109,748,030	209,618,523	205	18·29

[1] Gross note circulation of chartered banks. [2] Total issue less notes held by chartered banks and notes deposited in the Central Gold Reserves up to March, 1935. [3] Annual averages of daily figures supplied by the Bank of Canada. [4] Figures based on estimates of population as given on p. 113.

Section 4.—Monetary Reserves.

Subsection 1.—Bank of Canada Reserves.

In the 1936 edition of the Year Book, the composition of Canadian Gold Reserves held by the Government is presented for the years 1905 to 1934, in Table 3, p. 895. Since March, 1935, the gold reserves have been held by the Bank of Canada. By authority of the Exchange Fund Act (c. 60, 1935), effective in July, 1935, they are to be valued at the prevailing current market price of gold. The effect of the revaluation as from the above date is shown in the chart on p. 935. The new data are now to be found under the item "Reserves" on the "Assets" section of Table 1, p. 934.

Subsection 2.—Chartered Bank Canadian Cash Reserves.

Before the Establishment of the Bank of Canada.—Up to March, 1935, legal tender cash reserves in Canada were made up partly of Dominion notes (see pp. 937-938); and partly of gold coin and bullion, and subsidiary coin, including these forms of cash held by the banks themselves; and as deposits in the Central

Gold Reserves. In so far as these reserves were in actual gold or were in Dominion notes backed by gold, they were subject to the expanding or contracting influences of monetary gold imports or exports arising from Canada's balance of international payments, so long as Canada was on the gold standard.

Since the Establishment of the Bank of Canada.—When the Bank of Canada was established, the chartered banks turned over their reserves of gold in Canada and Dominion notes to the new bank in exchange for deposits with and notes of the Bank of Canada. It was provided that henceforth the chartered banks were to carry reserves in these forms amounting to at least 5 p.c. of their deposit liabilities in Canada. Since that time, therefore, the gold reserves against currency and bank credit have been in the custody of the central bank.

The cash reserves shown in Table 7, include, prior to Mar. 11, 1935, the gold and coin and Dominion notes held by the banks in Canada and the deposits in the Central Gold Reserves not ear-marked against the issue of bank notes, and, since the above date, notes of and deposits with the Bank of Canada.

7.—Cash Reserves of the Chartered Banks in Canada, 1926-38.

NOTE.—Figures supplied by the Bank of Canada. For detailed figures after 1935, see Table **10**, item 1.

Year.	Annual Average of Daily Figures.	Annual Average of Month-End Figures.
	$'000,000	$'000,000
1926	192	197
1927	187	194
1928	193	205
1929	191	212
1930	176	197
1931	169	182
1932	172	186
1933	189	195
1934	201	203
1935[1]	213	216
1936	225	225
1937	240	240
1938	254	252

[1] See text immediately preceding this table.

Section 5.—Commercial Banking.

Subsection 1.—Historical.

Since one of the chief functions of the early banks in Canada was to issue notes to provide a convenient currency or circulating medium, it has been expedient to cover both currency and banking in the one historical sketch which is given on pp. 901-905 of the 1938 Year Book. However, the function of note issue is no longer as important as it was. Latterly, the services of the chartered banks in gathering deposits from innumerable sources have emphasized the importance of deposit banking by which the savings of the people are put to immediate productive and commercial use; with the development of commercial banking, other necessary commercial banking facilities have been given more importance. Included among these is the mechanism of bills of exchange by which foreign trade is financed. The principal features of this development of commercial banking facilities in the evolution of the Canadian banking system may be summarized as follows: (1) its origin, closely related to the Montreal produce and export trade, and to the commerce of Halifax and Saint John; (2) the development of the branch bank system in order to meet the demands of a rapidly moving frontier of settlement; (3) the adaptation to the requirements of the grain and cattle trade of the west; and (4) the consolidation during later years of the features which tended towards its early success. The development of a stable system has been accompanied by failures, particularly marked about the middle of the 19th century, but progress has nevertheless been steady, based on sound principles, and adapted as closely as could be to the particular needs of the country.

The branch bank is perhaps the most distinctive feature of the Canadian system as it exists to-day, and for a country such as Canada, vast in area and with a small population, the plan has proved a good one. A result of the growth of branch banks was the development of a partially centralized system—centralized as to banks, of which there are now ten, rather than as to districts as in the partially centralized system of the United States. There were 28 chartered banks in existence at Confederation. The elimination of weaker banks or their amalgamation with more stable institutions has been a progressive move towards greater security and confidence. The banks at Confederation were as follows:—

Ontario and Quebec.

Bank of Montreal.
Quebec Bank.
Commercial Bank of Canada.
City Bank.
Gore Bank.
Bank of British North America.
Banque du Peuple.
Niagara District Bank.
Molson's Bank.
Bank of Toronto.
Ontario Bank.
Eastern Townships Bank.
Banque Nationale.
Banque Jacques-Cartier.
Merchants' Bank of Canada.
Royal Canadian Bank.
Union Bank of Lower Canada.
Mechanics' Bank.
Canadian Bank of Commerce.

Nova Scotia.
Bank of Yarmouth.
Merchants' Bank of Halifax.
People's Bank of Halifax.
Union Bank of Halifax.
Bank of Nova Scotia.

New Brunswick.
Bank of New Brunswick.
Commercial Bank of New Brunswick.
St. Stephen's Bank.
People's Bank of New Brunswick.

Table 8 shows the amalgamations since 1867, while a table at pp. 894-895 of the 1937 Year Book shows the insolvencies since Confederation; there have been no further changes reported and, therefore, the table is not reprinted here.

8.—Bank Absorptions in Canada since 1867.

Note.—The purchasing banks named in that part of the table on p. 943 are no longer in business.

Purchasing Bank.	Bank Absorbed.	Date.[1]
Bank of Montreal	Exchange Bank, Yarmouth, N.S	Aug. 13, 1903
	People's Bank of Halifax, N.S	June 27, 1905
	Ontario Bank	Oct. 13, 1906
	People's Bank of New Brunswick	Apr. 15, 1907
	Bank of British North America	Oct. 12, 1918
	Merchants' Bank of Canada	Mar. 20, 1922
	Molson's Bank	Jan. 20, 1925
Canadian Bank of Commerce	Gore Bank	May 19, 1870
	Bank of British Columbia	Dec. 31, 1900
	Halifax Banking Company	May 30, 1903
	Merchants' Bank of P.E.I	May 31, 1906
	Eastern Townships' Bank	Feb. 29, 1912
	Bank of Hamilton	Dec. 31, 1923
	Standard Bank of Canada	Nov. 3, 1928
Bank of Nova Scotia	Union Bank of P.E.I	Oct. 1, 1883
	Bank of New Brunswick	Feb. 15, 1913
	The Metropolitan Bank	Nov. 14, 1914
	The Bank of Ottawa	Apr. 30, 1919
Royal Bank of Canada	Union Bank of Halifax	Nov. 1, 1910
	Traders' Bank of Canada	Sept. 3, 1912
	Quebec Bank	Jan. 2, 1917
	Northern Crown Bank	July 2, 1918
	Union Bank of Canada	Aug. 31, 1925
Imperial Bank of Canada	Niagara District Bank	June 21, 1875
	The Weyburn Security Bank	May 1, 1931
Banque d'Hochelaga[2]	Banque Nationale	Apr. 30, 1924

---

[1] Dates later than 1900 are those of the Orders in Council authorizing the absorptions.

[2] The Banque d Hochelaga after absorbing the Banque Nationale adopted the name Banque Canadienne Nationale.

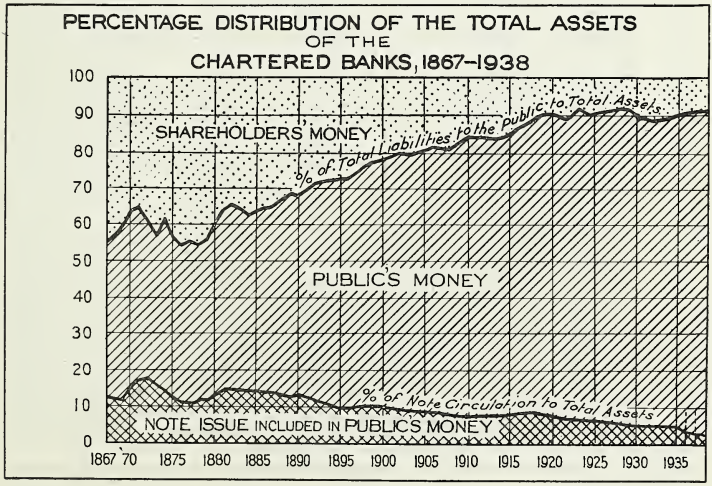
8.—**Bank Absorptions in Canada since 1867**—concluded.

Purchasing Bank.	Bank Absorbed.	Date.[1]
Bank of New Brunswick	Summerside Bank	Sept. 12, 1901
Merchants' Bank of Canada	Merchants' Bank	Feb. 22, 1868
	Commercial Bank of Canada	June 1, 1868
Union Bank of Halifax	Commercial Bank of Windsor	Oct. 31, 1902
Northern Crown Bank	The Northern Bank	July 2, 1908
	Crown Bank of Canada	July 2, 1908
Union Bank of Canada	United Empire Bank	Mar. 31, 1911
Home Bank of Canada	La Banque Internationale du Canada	Apr. 15, 1913
Standard Bank of Canada	Western Bank of Canada	Feb. 13, 1909
	Sterling Bank of Canada	Dec. 31, 1924

[1] Dates later than 1900 are those of the Orders in Council authorizing the absorptions.

Subsection 2.—Combined Statistics of Chartered Banks.

In Table 9 are given summary statistics of Canadian banking business since Confederation. In order to afford a clear view of the nature of banking transactions in Canada, bank liabilities have been classified in two main groups: liabilities to shareholders and liabilities to the public. Only the latter group is ordinarily considered when determining the financial position of any such institution. Assets are divided into four groups, 'other assets' being included in the total. As of interest to students of banking practice, the relative rates of increase of capital and reserve funds may be noted, also the great increase in the proportion of liabilities to the public to total liabilities, and the gradually increasing percentage of liabilities to the public to total assets. The accompanying chart of ownership division of total assets is of interest in this connection. The declining proportion of notes in circulation to total liabilities to the public is also characteristic of the evolution of banking in recent times. Holdings of Dominion and Provincial Government and municipal securities were relatively insignificant prior to the Great War.


PERCENTAGE DISTRIBUTION OF THE TOTAL ASSETS OF THE CHARTERED BANKS, 1867-1938

9.—Historical Summary showing Development of the Canadian

NOTE.—These statistics are yearly averages computed from the twelve monthly returns. Dashes
Figures for intermediate years not shown between 1870

LIABILITIES.

Calendar Year.	Liabilities to Shareholders.		Liabilities to the Public.				
	Capital.	Rest or Reserve Fund.	Notes in Circulation.	Demand Deposits in Canada.	Notice Deposits in Canada.	Total on Deposit.[1]	Total Public Liabilities.[2]
	$	$	$	$	$	$	$
1867......	30,926,470[3]	–	9,346,081[3]	–	–	31 375,316[3]	43,273,969[3]
1868.....	30,507,447	–	9,350,646	–	–	33,653,594	45,144,854
1869.....	30,782,637	–	9,539,511	–	–	40,028,090	50,940,226
1870......	33,031,249	–	15,149,031	–	–	48,763,205	65,685,870
1875.....	64,619,513	–	23,035,039	–	–	74,642,446	104,609,356
1880.....	60,052,117	–	22,529,623	–	–	85,303,814	111,838,941
1881.....	59,534,977	–	28,516,692	–	–	94,346,481	127,176,249
1882.....	59,799,644	–	33,582,080	–	–	110,133,124	149,777,214
1883.....	61,390,118	–	33,283,302	–	–	107,648,383	145,938,095
1884.....	61,579,021	18,149,193[4]	30,449,410	–	–	102,398,228	137,493,917
1885.....	61,711,566	17,879,716	30,720,762	–	–	104,014,660	138,762,695
1886.....	61,662,093	17,817,693	31,030,499	–	–	111,449,365	146,954,260
1887.....	60,860,561	17,873,582	32,478,118	–	–	112,656,985	149,704,402
1888.....	60,345,035	18,529,911	32,205,259	–	–	125,136,473	163,990,797
1889.....	60,229,752	19,766,426	32,207,144	–	–	134,650,732	173,029,602
1890.....	59,974,902	21,127,838	32,834,511	–	–	135,548,704	173,207,587
1891.....	60,700,697	22,821,501	33,061,042	–	–	148,396,968	187,332,325
1892.....	61,626,311	24,511,709	33,788,679	–	–	160,668,471	208,062,169
1893.....	62,009,346	25,837,753	33,811,925	–	–	174,776,722	217,195,975
1894.....	62,063,371	27,041,235	31,166,003	–	–	181,743,890	221,066,724
1895.....	61,800,700	27,273,500	30,807,041	–	–	190,916,939	229,794,322
1896.....	62,043,173	26,526,632	31,456,297	–	–	193,616,049	232,338,086
1897.....	62,027,703	27,087,782	34,350,118	–	–	211,788,096	252,660,708
1898.....	62,571,920	27,627,520	37,873,934	–	–	236,161,062	281,076,656
1899.....	63,726,399	28,958,989	41,513,139	–	–	266,504,528	318,624,033
1900.....	65,154,594	32,372,394	46,574,780	–	–	305,140,242	356,394,095
1901.....	67,035,615	36,249,145	50,601,205	95,169,631[4]	221,624,664[4]	349,573,327	420,003,743
1902.....	69,869,670	40,212,943	55,412,598	104,424,203	244,062,545	390,370,493	466,963,829
1903.....	76,453,125	47,761,536	60,244,072	112,461,757	269,911,501	424,167,140	507,527,550
1904.....	79,234,191	52,082,335	61,769,888	117,962,023	307,007,192	470,265,744	554,014,076
1905.....	82,655,828	56,474,124	64,025,643	138,116,550	338,411,275	531,243,476	618,678,633
1906.....	91,035,604	64,002,266	70,638,870	165,144,569	381,778,705	605,968,513	713,790,553
1907.....	95,953,732	69,806,892	75,784,482	166,342,144	413,014,657	654,839,711	769,026,924
1908.....	96,147,526	72,041,265	71,401,697	169,721,755	406,103,063	658,367,015	762,077,184
1909.....	97,329,333	75,887,695	73,943,119	225,414,828	464,635,263	783,298,880	882,598,547
1910.....	98,787,929	79,970,346	82,120,303	260,232,399	532,087,627	909,964,839	1,019,177,601
1911.....	103,009,256	88,892,256	89,982,223	304,801,755	568,976,209	980,433,788	1,097,661,393
1912.....	112,730,943	102,090,476	100,146,541	359,431,895	625,705,765	1,102,910,383	1,240,124,354
1913.....	116,297,729	109,129,393	105,265,336	367,214,143	626,199,470	1,126,871,523	1,287,372,534
1914.....	114,759,807	113,130,626	104,600,185	346,069,908	656,760,687	1,144,211,363	1,309,944,006
1915.....	113,982,741	113,020,310	105,137,092	358,444,252	690,904,274	1,198,340,315	1,353,629,123
1916.....	113,175,353	112,989,541	126,691,913	428,717,781	780,842,383	1,418,035,429	1,596,905,337
1917.....	111,637,755	113,560,997	161,029,606	468,049,790	928,271,838	1,643,203,020	1,866,228,236
1918.....	110,618,504	114,041,500	198,645,254	587,342,904	966,341,499	1,912,395,780	2,184,359,820
1919.....	115,004,960	121,160,774	218,919,261	621,676,065	1,125,202,403	2,189,428,885	2,495,582,568
1920.....	123,617,120	128,756,690	228,800,379	653,862,869	1,239,308,076	2,438,079,792	2,784,068,698
1921.....	129,096,339	134,104,030	194,621,710	551,914,643	1,289,347,063	2,264,586,736	2,556,454,190
1922.....	125,456,485	129,627,270	166,466,109	502,781,234	1,191,637,004	2,120,997,030	2,364,822,657
1923.....	124,373,293	126,441,667	170,420,792	523,170,930	1,197,277,065	2,107,606,111	2,374,308,376
1924.....	122,409,504	123,841,666	166,136,765	511,218,736	1,198,246,414	2,130,621,760	2,438,771,001
1925.....	118,831,327	123,108,366	165,235,168	531,180,578	1,269,542,584	2,221,160,611	2,532,832,064
1926.....	116,638,254	125,441,700	168,885,995	553,322,935	1,340,559,021	2,277,192,043	2,604,601,786
1927.....	121,666,774	130,320,897	172,100,763	596,069,007	1,399,062,201	2,415,132,260	2,758,324,713
1928.....	122,839,879	134,087,485	176,716,979	677,467,295	1,496,608,451	2,610,594,865	3,044,742,165
1929.....	137,269,085	150,636,682	178,291,030	696,387,381	1,479,870,058	2,696,747,857	3,215,503,098
1930.....	144,560,874	160,639,246	159,341,085	622,895,347	1,427,569,716	2,516,611,587	2,909,530,263
1931.....	144,674,853	162,075,000	141,969,350	578,604,394	1,437,976,832	2,422,834,828	2,741,554,219
1932.....	144,500,000	162,000,000	132,165,942	486,270,764	1,376,325,128	2,256,639,530	2,546,149,789
1933.....	144,500,000	157,250,000	130,362,488	488,527,864	1,378,497,944	2.236,841,539	2,517,934,260
1934.....	144,916,667	132,604,166	135,537,793	513,973,506	1,372,817,869	2,274,607,936	2,548,720,434
1935....:	145,500,000	132,750,000	125,644,102	568,615,373	1,445,281,247	2,426,760,923	2,667,950,352
1936.....	145,500,000	133,000,000	119,507,306	618,340,561	1,518,216,945	2,614,895,597	2,855,622,232
1937.....	145,500,000	133,750.000	110,259,134	691,319,545	1,573,654,555	2,775,530,413	3,025,721,653
1938.....	145,500,000	133,750,000	99,870,493	690,485,877	1,630,481,857	2,823,686,934	3,056,684,905

---

[1] Includes the deposits of Dominion and Provincial Governments and also, since 1901, deposits elsewhere than in Canada. [2] Includes other liabilities to the public. [3] Six-month average.
[4] First year reported.

Chartered Banking Business, calendar years 1867-1938.

indicate that no information is available under the corresponding column heads for the years indicated. and 1880 will be found at pp. 918-919 of the 1938 Year Book.

ASSETS.

Calendar Year.	Specie and Dominion or Bank of Canada Notes.	Dominion and Provincial Government Securities.	Municipal Securities in Canada and Public Securities Elsewhere.	Total Securities.	Total Loans.	Total Assets.[1]	P.C. of Public Liabilities to Total Assets.
	$	$	$	$	$	$	p.c.
1867....	–	–	–	–	53,889,703[2]	78,294,670[2]	55·27[2]
1868...	–	–	–	–	52,299,050	79,860,976	56·53
1869...	–	–	–	–	56,433,953	86,283,693	59·04
1870...	–	–	–	–	66,276,961	103,197,103	63·65
1875...	–	–	–	–	136,029,307	186,255,330	56·17
1880...	–	–	–	–	102,166,115	184,276,190	60·69
1881...	–	–	–	–	116,953,497	200,613,879	63·39
1882...	–	–	–	–	140,077,194	227,426,835	65·86
1883...	–	–	–	–	143,944,957	228,084,650	63·98
1884...	–	–	–	–	130,490,053	219,998,642	62·50
1885...	–	.	–	–	126,827,792	219,147,080	63·32
1886...	–	–	–	–	132,833,313	228,061,872	64·44
1887...	–	–	–	–	139,753,755	230,393,072	64·98
1888...	–	–	–	–	141,002,373	243,504,164	67·35
1889...	–	–	–	–	149,958,980	253,789,803	68·18
1890...	–	–	–	–	153,301,335	254,546,329	68·05
1891...	–	–	–	–	171,082,677	269,307,032	69·56
1892...	17,794,201[3]	–	–	–	193,455,883	291,635,251	71·34
1893...	19,714,648	–	–	–	206,623,042	302,696,715	71·75
1894...	22,371,954	–	–	–	204,124,939	307,520,020	71·87
1895...	22,992,872	–	–	–	203,730,800	316,536,510	72·50
1896...	22,318,627	–	–	–	213,211,996	320,937,643	72·39
1897...	24,178,151	–	–	–	212,014,635	341,163,505	74·06
1898...	25,330,564	–	–	–	223,806,320	370,583,991	75·86
1899...	26,682,971	–	–	–	251,467,076	412,504,768	77·24
1900...	29,047,382	–	–	–	279,279,761	459,715,065	77·52
1901...	32,088,501	11,331,385[3]	13,031,176[3]	–	388.299,888	531,829,324	78·97
1902...	35,478,598	9,804,998	14,487,632	–	430,662,670	585,761,109	79·72
1903...	42,510,574	11,186,607	14,896,472	–	472,019,689	641,543,226	79·11
1904...	50,307,871	10,705,202	15,560,145	–	509,011,993	695,417,756	79·67
1905...	56,590,323	8,833,626	18,820,985	–	559,814,918	767,490,183	80·61
1906...	61,287,581	9,360,614	20,460,670	–	655,869,879	878,512,076	81·25
1907...	70,550,520	9,546,927	21,198,817	–	709,975,274	945,685,708	81·32
1908...	80,654,276	9,522,743	19,788,937	–	670,170,833	941,290,619	80·96
1909...	95,558,461	11,653,798	21,707,363	–	762,195,546	1,067,007,534	82·72
1910...	104,735,626	14,741,621	21,696,987	–	870,100,890	1,211,452,351	84·13
1911...	120,146,690	10,637,580	22,848,170	–	926,909,616	1,303,131,260	84·23
1912...	132,853,405	9,388,968	22,586,119	–	1,061,843,991	1,470,065,478	84·36
1913...	141,872,884[4]	9,995,237	23,183,162	–	1,109,493,263	1,530,093,671	84·14
1914...	165,845,957[4]	11,697,603	22,707,738	–	1,101,880,924	1,555,676,395	84·20
1915...	208,438,854[4]	12,814,898	31,553,091	–	1,066,252,854	1,596,424,643	84·75
1916...	230,113,831[4]	29,717,007	117,902,686	–	1,135,866,531	1,839,286,709	86·82
1917...	265,389,567[4]	131,078,854	138,341,125	–	1,219,161,252	2,111,559,555	88·38
1918...	351,762,841[4]	162,821,026	252,936,568	–	1,339,660,669	2,432,331,418	89·81
1919...	370,775,723[4]	214,621,625	256,270,715	–	1,552,971,202	2,754,568,118	90·60
1920...	367,165,054[4]	120,356,255	210,826,991	–	1,935,449,637	3,064,133,843	90·86
1921...	335,081,032[4]	166,688,146	156,552,503	–	1,781,184,781	2,841,782,079	89·96
1922...	305,522,425[4]	198,826,031	90,131,491	–	1,643,643,443	2,638,776,483	89·62
1923...	291,999,879[4]	242,292,315	112,642,627	401,792,206[3]	1,606,932,483	2,643,773,986	92·16
1924...	266,961,330[4]	314,099,097	135,597,860	502,561,847	1,546,792,080	2,701,427,011	90·28
1925...	259,714,043[4]	358,344,887	147,563,292	565,505,647	1,562,017,009	2,789,619,061	90·80
1926...	252,754,268[4]	343,595,936	127,765,375	532,817,056	1,682,379,658	2,864,019,213	90·94
1927...	252,188,447[4]	324,580,796	133,314,843	520,971,402	1,839,905,275	3,029,680,616	91·04
1928...	264,804,251[4]	333,837,004	124,996,823	522,628,208	2,072,403,628	3,323,163,195	91·62
1929...	261,625,173[4]	341,744,572	104,309,024	499,015,138	2,279,247,504	3,528,468,027	91·13
1930...	232,016,616[4]	316,196,343	101,585,131	471,637,542	2,064,597,746	3,237,073,853	89·88
1931...	207,983,857[4]	454,386,965	154,829,056	674,357,232	1,764,088,477	3,066,018,472	89·42
1932...	206,925,103[4]	489,709,241	150,891,599	695,758,801	1,582,667,313	2,869,429,779	88·73
1933...	209,550,285[4]	626,881,709	163,834,318	841,151,958	1,409,067,110	2,831,393,641	88·93
1934...	214,419,280[4]	683,498,403	139,850,099	866,725,958	1,373,683,071	2,837,919,961	89·81
1935...	227,692,952[5,6]	860,942,292	137,764,626	1,044,351,653	1,276,430,825	2,956,577,704	90·24
1936...	240,596,447[5]	1,074,795,141	161,879,725	1,330,808,991	1,140,557,800	3,144,506,755	90·81
1937...	249,372,724[5]	1,118,893,938	181,972,016	1,426,371,394	1,200,574,223	3,317,087,132	91·22
1938...	262,354,597[5]	1,143,040,485	170,487,703	1,439,666,822	1,200,692,605	3,348,708,580	91·28

---

[1] Includes other assets. [2] Six-month average. [3] First year reported. [4] Includes deposits in Central Gold Reserves. [5] Specie and notes of, and deposits in, the Bank of Canada. [6] Ten-month average.

10.—Assets of Chartered Banks, 1929, 1932, and 1936-38.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year. As the first two items have been worked out only to the nearest million for the years prior to 1936, the totals for 1929 and 1932 are not the exact sums of the individual items.

Item.	1929.	1932.	1936.	1937.	1938.
	$	$	$	$	$
Cash reserves against Canadian deposits (as per Table 7).....	212,000,000	186,000,000	225,126,826	239,893,926	252,144,266
Secured bank-note issue........	25,000,000	2,000,000	[1]	Nil	Nil
Subsidiary coin................	[2]	[2]	5,430,512	5,075,458	5,338,991
Notes of other Canadian banks.	16,807,334	11,247,365	6,592,665	6,048,097	5,892,138
Cheques of other banks........	149,545,199	82,948,867	107,274,939	110,292,586	111,586,831
Deposits at other Canadian banks........................	4,698,323	3,461,775	4,581,657	4,584,844	4,189,163
Gold and coin abroad.........	24,797,260	19,089,489	10,039,218	4,403,340	4,871,340
Foreign currencies.............	19,468,671	16,022,766	23,678,115	23,086,428	27,223,767
Deposits at United Kingdom banks........................	4,826,444	9,383,994	28,842,740	23,783,213	31,383,908
Deposits at foreign banks......	86,178,585	97,999,358	91,808,124	96,487,680	102,293,489
Securities—					
Dominion and Provincial Government securities.....	341,744,572	489,709,241	1,074,795,141	1,118,893,938	1,143,040,485
Other Canadian and foreign public securities...........	104,309,024	150,891,599	161,879,725	181,972,016	170,487,703
Other bonds, debentures, and stocks.....................	52,961,542	55,157,961	94,134,125	125,505,440	126,138,634
Call and Short Loans—					
In Canada..................	267,271,438	117,224,745	93,225,528	107,443,328	66,722,525
Elsewhere...................	301,091,053	84,227,574	64,379,795	67,697,568	51,427,577
Current Loans—					
Canada—					
Loans to Provincial Governments................	19,002,655	34,386,119	20,729,091	19,652,784	19,821,221
Loans to cities, towns, municipalities, and school districts.........	93,325,211	130,567,792	99,940,882	97,769,341	109,145,741
Other current loans and discounts................	1,342,666,883	1,032,081,481	698,689,782	731,660,179	786,145,073
Elsewhere than in Canada...	248,367,887	171,861,621	150,338,542	164,776,853	157,672,674
Non-current loans.............	7,522,377	12,317,980	13,254,180	11,574,170	9,757,794
Other Assets—					
Real estate, other than bank premises..................	5,618,820	7,141,708	8,795,431	8,662,108	8,305,205
Mortgages on real estate sold by the banks..............	7,221,774	6,244,908	4,796,988	4,228,687	4,323,494
Bank premises..............	75,536,822	79,714,603	75,446,272	74,420,237	73,349,685
Bank circulation redemption fund.......................	6,246,861	6,721,355	6,971,506	6,697,792	5,744,888
Liabilities of customers under letters of credit as *per contra*.................	100,473,805	48,671,585	62,011,410	69,512,423	58,269,394
All other assets.............	11,957,574	14,520,279	11,743,561	12,964,696	13,432,594
Totals, Assets........	**3,528,468,027**	**2,869,429,779**	**3,144,506,755**	**3,317,087,132**	**3,348,708,580**

[1] System changed due to establishment of the Bank of Canada. [2] Included in first item.

11.—Liabilities of Chartered Banks, 1929, 1932, and 1936-38.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Item.	1929.	1932.	1936.	1937.	1938.
	$	$	$	$	$
LIABILITIES TO THE PUBLIC.					
Notes in Circulation	178,291,030	132,165,942	119,507,306	110,259,134	99,870,493
Deposit Liabilities—					
Government Deposits—					
Dominion	77,815,312	55,598,660	37,829,790	47,244,049	49,436,735
Provincial	24,536,732	26,151,681	39,338,129	42,705,268	44,952,800
Advances from Bank of Canada secured	Nil	Nil	Nil	Nil	416,66
Public Deposits—					
Demand	696,387,381	486,270,764	618,340,561	691,319,545	690,485,877
Time	1,479,870,058	1,376,325,128	1,518,216,945	1,573,654,555	1,630,481,857
Foreign	418,138,374	312,293,297	401,170,172	420,606,996	408,329,665
Inter-Bank Deposits—					
Canadian	14,528,474	10,694,683	13,648,502	14,572,664	15,609,409
United Kingdom	25,693,879	5,131,001	9,490,214	12,208,396	11,455,218
Other	100,254,711	49,732,341	30,152,038	37,432,300	41.236,295
Totals, Deposit Liabilities[1]	2,837,224,921	2,322,197,555	2,668,186,351	2,839,743,773	2,892,404,522
Canadian currency (estimated)	*2,293,000,000*	*1,955,000,000*	*2,245,000,000*	*2,382,000,000*	*2,449,000,000*
Foreign currency (estimated)	*544,000,000*	*367,000,000*	*423,000,000*	*458,000,000*	*443,000,000*
Totals, Note and Deposit Liabilities	3,015,515,951	2,454,363,497	2,787,693,657	2,950,002,907	2,992,275,015
Advances under the Finance Act	82,916,667	37,352,667	Nil	Nil	Nil
Other Liabilities to the Public—					
Bills payable	10,842,329	1,579,945	1,052,312	953,701	411,131
Letters of credit outstanding	100,473,804	48,671,585	62,011,410	69,512,423	58,269,394
Liabilities not included under foregoing heads	5,754,347	4,182,095	4,864,853	5,252,622	5,729,365
TOTALS, LIABILITIES TO THE PUBLIC	3,215,503,098	2,546,149,789	2,855,622,232	3,025,721,653	3,056,684,905
LIABILITIES TO SHAREHOLDERS.					
Capital	137,269,085	144,500,000	145,500,000	145,500,000	145,500,000
Rest or reserve fund	150,636,682	162,000,000	133,000,000	133,750,000	133,750,000
Grand Totals, Liabilities	**3,503,408,865**	**2,852,649,789**	**3,134,122,232**	**3,304,971,653**	**3,335,934,905**

---

[1] The totals of deposit liabilities do not correspond with those shown in Table **9** because of the inclusion here of inter-bank deposits.

12.—Ratio Comparisons of Certain Assets and Liabilities of Chartered Banks, 1926-38.

NOTE.—Yearly averages of month-end figures, except where otherwise specified.

Year.	Canadian Cash to Canadian Deposits.		Securities to Note and Deposit Liabilities.	Loans to Note and Deposit Liabilities.
	Daily.[1]	Month-End.		
	p.c.	p.c.	p.c.	p.c.
1926	9·8	10·1	21·3	67·2
1927	9·0	9·4	19·7	69·4
1928	8·5	9·1	18·2	72·0
1929	8·3	9·2	16·6	75·6
1930	8·2	9·2	17·1	74·6
1931	8·1	8·6	25·5	66·7
1932	8·8	9·5	28·4	64·5
1933	9·8	10·1	34·8	58·2
1934	10·2	10·3	35·3	56·0
1935	10·1	10·2	40·1	49·1
1936	10·2	10·0	47·7	40·9
1937	10·2	10·1	48·4	40·7
1938	10·5	10·3	48·1	40·1

---

[1] Supplied by the Bank of Canada.

Classification of Deposits and Loans.—As a result of an amendment to the Bank Act in 1934, deposits and loans are required to be classified according to size of the deposit, or purpose of the loan, each year. The following figures cover deposits and loans in Canada only.

13.—Classification of Deposits, According to Size, in Chartered Banks in Canada, as at Oct. 31, 1936-38.

NOTE.—For figures for 1934, see the 1937 Year Book, p. 902; for 1935 figures, the 1938 Year Book, p. 922.

Kind and Size of Deposit.	1936.		1937.		1938.	
	No.	$	No.	$	No.	$
Deposits Payable on Demand—						
$1,000 or less	580,008	81,662,728	596,830	84,938,517	604,490	88,127,361
$1,000 to $5,000	43,622	89,701,847	47,438	97,755,972	50,094	102,443,022
$5,000 to $25,000	10,469	108,384,569	11,416	114,786,855	11,991	121,542,883
$25,000 to $100,000	2,328	107,745,525	3,542	115,483,832	2,708	125,413,101
Over $100,000	697	279,808,927	765	264,111,589	861	306,077,873
Adjustment items[1]	-	−3,021,929	-	2,048,380	-	5,752,550
Totals	**637,124**	**664,281,667**	**659,991**	**679,125,145**	**670,144**	**749,356,790**
Deposits Payable After Notice—						
$1,000 or less	3,664,756	432,501,930	3,770,692	456,017,245	3,797,481	452,808,233
$1,000 to $5,000	268,525	537,147,512	274,810	551,364,607	284,243	571,677,424
$5,000 to $25,000	34,224	297,615,548	36,343	315,602,966	38,077	330,974,095
$25,000 to $100,000	2,313	99,078,550	2,371	103,622,340	2,541	111,882,640
Over $100,000	496	141,338,693	536	154,100,491	621	185,235,546
Adjustment items[1]	-	2,637,199	-	2,987,073	-	3,204,167
Totals	**3,970,314**	**1,510,319,432**	**4,084,752**	**1,583,694,722**	**4,122,963**	**1,655,782,105**

[1] Representing certified cheques, interest accrued on interest-bearing accounts, items in transit, etc.

14.—Loans, According to Class, made by Chartered Banks in Canada and Outstanding as at Oct. 31, 1936-38.

NOTE.—For figures for 1934, see the 1937 Year Book, p. 902; for 1935 figures, the 1938 Year Book, p. 922.

Class of Loan.	1936.	1937.	1938.
	$	$	$
Provincial Government	14,711,533	26,384,534	22,847,911
Municipal government and school district	91,982,393	94,187,869	114,507,761
Agricultural—			
(a) Loans to farmers, cattlemen, and fruit growers	53,959,605	57,490,784	56,802,780
(b) Loans to grain dealers, grain exporters and seed merchants	64,528,319	30,803,892	91,651,082
Totals, Agricultural	118,487,924	88,294,676	148,453,862
Financial—			
(a) Call loans and other accommodation to brokers and bond dealers	97,376,547	73,531,185	62,401,107
(b) Loans to trust, loan, mortgage, investment and insurance companies and other financial institutions	73,830,397	68,966,413	66,906,329
(c) Loans to individuals against approved stocks and bonds not otherwise classified	111,462,635	142,798,237	120,450,926
Totals, Financial	282,669,579	285,295,835	249,758,362
Merchandising, wholesale and retail	115,889,919	129,635,451	133,652,188
Manufacturing—dealers in, lumber, pulpwood, and products thereof	64,850,267	62,949,545	75,176,990
Other manufacturing of all descriptions	129,962,252	156,555,520	138,380,018
Mining	6,898,818	6,109,791	8,904,144
Fishing, including packers and curers of fish	8,193,886	7,709,483	8,683,300
Public utility, including transportation companies	8,387,018	11,948,007	24,923,530
Building—contractors and others for building purposes	23,719,245	33,579,276	39,248,172
Charitable and religious institutions—churches, parishes, hospitals, etc	14,797,993	16,408,806	19,359,989
Other	52,986,222	61,567,831	74,691,584
Grand Totals	**933,537,049**	**980,626,624**	**1,058,587,811**

Clearing-House Transactions.—In advanced industrial societies money is only 'the small change of commerce'. The great bulk of monetary transfers, particularly in the case of the larger transactions, is made through the banks. Thus it has been estimated that, in the United States in 1917, about 6 p.c. of the business transactions of the country were financed by the use of money and the remaining 94 p.c. by the use of cheques. Accordingly, if we knew the aggregate amount of the cheques paid through the banks and charged to accounts, we should have an almost complete record of the volume of business transacted, and thus of the business activity of the country.

Statistics of this character were at first secured through the operation of the clearing houses—places where the representatives of all the banks met daily in the leading cities and presented for payment the notes of other banks and the cheques drawn upon other banks that had been paid in to their institutions in the regular course of business. In Canada, the first clearing houses to be established were those of Halifax (1887), Montreal (1889), Toronto (1891), Hamilton (1891), and Winnipeg (1893), and the number has subsequently increased to 32.

For the purpose of the Central Clearing Settlement, each bank maintains in its account with the Bank of Canada, Ottawa, a balance (in excess of whatever deposit is maintained as part of the 5 p.c. reserve against deposit liabilities in Canada required by statute) deemed sufficient to settle its clearing obligations. Montreal, Ottawa, Toronto, Winnipeg, and Vancouver are settlement points for the clearing houses in their respective zones. The debit or credit balances of the banks at the specified points are daily communicated by the clearing-house manager, and confirmed by the respective bank, to the local agent of the Bank of Canada (to the Bank of Canada in the case of Ottawa) for transmission to the Bank of Canada at Ottawa by telephone or telegraph, which bank on the same day debits or credits, as the case may be, the account of the respective bank maintained with the Bank of Canada. By this means practically all the banking transactions of the country are adjusted daily in Ottawa in the accounts maintained by the banks with the Bank of Canada.

Table **15** shows for the years 1934-38 the total volume of clearings in the clearing houses of Canada. These figures, it may be added, represent not only actual city clearings but exchanges between numerous rural branches in each district.

15.—Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada, calendar years 1934-38.

NOTE.—For the years 1919-23, see p. 806 of the 1924 Year Book; for 1924-28, p. 859 of the 1929 Year Book; for 1929-32, p. 911 of the 1933 Year Book; and for 1933, p. 988 of the 1934-35 Year Book.

Clearing House.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Brandon	15,458,987	15,020,604	16,404,775	16,950,884	17,582,200
Brantford	38,456,332	41,207,595	45,356,164	50,506,997	46,424,869
Calgary	255,085,201	292,584,549	305,417,532	306,818,675	300,161,170
Chatham	22,211,932	22,192,630	25,865,402	31,781,621	30,160,322
Edmonton	189,164,864	199,411,079	197,022,175	206,183,407	201,035,055
Fort William	32,061,443	30,651,099	37,944,014	40,556,659	37,527,993
Halifax	110,685,559	112,710,681	119,545,816	134,094,626	128,130,093
Hamilton	191,235,709	197,844,548	236,482,873	285,024,414	254,838,784
Kingston	26,825,520	26,779,593	28,025,967	29,466,619	29,132,380

15.—Amounts of Exchanges of the Clearing Houses of Chartered Banks in Canada, calendar years 1934-38—concluded.

Clearing House.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Kitchener	50,268,751	50,414,984	54,834,963	56,542,066	56,352,022
Lethbridge	20,785,708	23,963,854	24,105,821	25,229,839	26,331,675
London	128,018,177	134,707,964	145,222,921	146,861,077	133,836,073
Medicine Hat	10,988,541	12,995,361	12,367,706	12,092,715	12,080.166
Moncton	34,991,249	35,753,000	37,250,494	41,278,230	38,511,645
Montreal	4,653,226,857	4,582,416,573	5,386,188,857	5,871,146,518	5,382,362,315
Moose Jaw	24,740,854	27,283,900	31,587,919	30,976,707	29,487,745
New Westminster	25,028,251	27,463,691	32,166,195	35,055,324	32,687,614
Ottawa	219,698,923	1,076,864,472	1,132,979,446	1,091,883,251	998,823,343
Peterborough	30,920,440	31,325,062	32,347,673	32,660,582	30,946,954
Prince Albert	14,357,763	18,437,203	17,814,604	18,048,670	15,742,684
Quebec	200,669,727	207,012,322	222,901,251	264,680,505	250,085,177
Regina	181,277,356	191,995,407	218,683,823	186,954,514	207,704,393
Saint John	84,066,825	84,059.113	90,730,398	99,326,689	91,306,823
Sarnia	20,886,635	23,082,010	23,754,497	24,842,473	24,564,744
Saskatoon	65,343,280	74,956,723	77,033,722	70,019,704	64,577,460
Sherbrooke	28,628,148	28,659,155	29,959,127	35,528,449	36,194,610
Sudbury	34,881,455	38,895,230	46,340,527	50,746,395	51,778,260
Toronto	5,643,522,459	5,720,065,081	6,465,263,740	6,397,876,564	5,835.980,087
Vancouver	755,532,352	781,264,535	953,566,363	975,233,058	867,619,815
Victoria	73,931,173	79.007,806	87,484,888	89,962,678	85,997,667
Windsor	104,459,995	115,902,542	142,249,058	161,779,776	145,037,711
Winnipeg	2,676,160,032	2,622,557,766	2,925,627,890	2,030,163,981	1,800,572,038
Totals	**15,963,570,498**	**16,927,486,132**	**19,202,526,601**	**18,850,384,667**	**17,263,573,887**

Bank Debits.—As the number of separate banks has in recent years been steadily diminishing through amalgamations (see pp. 942-943), there being only 10 in December, 1938,* as compared with 18 in 1923, inter-bank transactions are a steadily decreasing proportion of total business transacted, and bank clearings have ceased to be a satisfactory measure of general business. The Canadian Bankers' Association agreed to secure from January, 1924, the monthly aggregate figures of the amount of cheques charged to accounts at all banking offices situated in the clearing-house centres of Canada, and monthly and annual figures of cheques charged to accounts (bank debits) have been published since that time by the Dominion Bureau of Statistics. Further, in order that an estimate might be made of the proportion of banking transactions outside the clearing-house cities to the total, the Canadian Bankers' Association secured for the month of January, 1935, the grand total of all cheques charged to accounts at all branch banks throughout the Dominion. The results were published in the Bureau's Monthly Review of Bank Debits for February, 1935, and showed that in January, 1935, the aggregate of transactions outside the clearing-house cities was 12½ p.c. of the grand total in the clearing-house cities. The corresponding figures in the five economic areas were as follows: Maritime Provinces 104·2 p.c.; Quebec 6·9 p.c.; Ontario 13·5 p.c ; Prairie Provinces 8·4 p.c.; British Columbia 16·7 p.c. Only in the Maritime Provinces did the total of bank debits in clearing-house cities appear to represent inadequately the grand total of business transactions.

---

* Barclays Bank, established in 1929, was the latest addition to the commercial chartered banks in Canada; the number has remained at 10 since 1931.

16.—Bank Debits at the Clearing-House Centres of Canada, by Individual Centres, calendar years 1934-38.

Note.—For the years 1924-28, see pp. 860-861 of the 1929 Year Book; for 1929-32, p. 912 of the 1933 Year Book; and for 1933, p. 989 of the 1934-35 Year Book.

Clearing-House Centre.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Maritime Provinces—					
Halifax	275,948,590	310,052,273	341,775,552	406,591,857	339,640,504
Moncton	87,228,253	90,680,025	98,641,301	112,550,923	108,145,304
Saint John	171,074,214	173,320,562	189,985,161	214,216,666	191,897,145
Totals, Maritime Provinces	534,251,057	574,052,860	630,402,014	733,359,446	639,682,953
Quebec—					
Montreal	8,834,691,435	8,307,134,410	10,150,016,770	10,596,261,705	9,005,746,968
Quebec	550,663,976	606,964,150	717,146,205	888,524,702	875,695,644
Sherbrooke	64,354,455	63,430,463	71,484,756	83,635,135	83,739,779
Totals, Quebec	9,449,709,866	8,977,529,023	10,938,647,731	11,568,421,542	9,965,182,391
Ontario—					
Brantford	84,950,018	94,186,017	103,221,469	120,088,991	109,468,693
Chatham	71,122,708	79,902,107	100,652,126	111,553,991	103,272,854
Fort William	49,838,324	50,202,917	63,348,734	68,085,229	68,129,478
Hamilton	528,307,959	559,388,191	601,358,570	691,483,173	625,033,425
Kingston	52,719,962	55,634,971	67,867,438	76,687,282	71,213,576
Kitchener	108,804,353	114,191,829	128,018,389	143,265,155	141,030,659
London	334,741,204	362,317,629	420,889,625	413,075,352	389,223,524
Ottawa	1,914,296,966	1,444,156,227	1,469,292,434	1,348,844,155	1,203,891,077
Peterborough	53,767,240	60,023,193	68,620,664	75,770,408	70,269,426
Sarnia	78,158,895	69,145,537	74,160,267	81,347,420	75,489,832
Sudbury	48,991,202	55,597,151	72,735,265	88,780,681	84,715,014
Toronto	11,389,321,892	10,642,516,427	12,168,836,487	12,226,885,028	10,428,035,428
Windsor	204,483,372	289,364,280	439,678,369	493,282,632	440,290,022
Totals, Ontario	14,919,504,095	13,876,626,476	15,778,679,837	15,939,149,497	13,810,063,008
Prairie Provinces—					
Brandon	26,885,135	25,666,690	28,313,991	31,358,553	32,845,981
Calgary	526,966,099	616,831,075	636,145,594	658,768,183	650,666,363
Edmonton	382,681,968	400,418,426	387,386,725	417,969,669	430,271,739
Lethbridge	42,671,124	48,945,714	45,780,043	51,787,553	57,226,409
Medicine Hat	25,377,296	27,322,542	26,842,729	26,611,236	28,155,429
Moose Jaw	51,316,748	53,874,399	77,376,584	73,307,647	68,605,328
Prince Albert	21,106,682	24,434,064	25,976,662	28,790,736	25,789,444
Regina	475,031,328	505,052,792	495,621,447	428,357,691	507,534,686
Saskatoon	102,963,180	110,058,112	121,553,190	121,374,564	114,863,759
Winnipeg	4,682,240,160	4,632,791,950	4,660,521,712	2,988,695,575	2,656,424,383
Totals, Prairie Provinces	6,337,239,720	6,445,395,764	6,505,518,677	4,827,021,407	4,572,383,521
British Columbia—					
New Westminster	52,390,693	59,819,150	70,089,850	74,751,206	73,972,517
Vancouver	1,320,856,775	1,349,924,217	1,682,786,803	1,692,513,585	1,546,113,353
Victoria	252,720,716	262,718,851	322,481,831	330,844,455	316,964,989
Totals, British Columbia	1,625,968,184	1,672,462,218	2,075,358,484	2,098,109,246	1,937,050,859
Grand Totals	**32,866,672,922**	**31,546,066,341**	**35,928,606,743**	**35,166,061,138**	**30,924,362,732**

Subsection 3.—Statistics of Individual Chartered Banks.

Assets and Liabilities.—Tables 17 and 18 show, respectively, the principal and total assets and liabilities of the individual banks for the years 1929 and 1935-38, the figures being averages computed from the monthly bank returns. The statistics in column 2 of Table 17 represent, for the years 1935 (when the Bank of Canada was established) to 1938, the total of Bank of Canada notes in the possession of the chartered banks together with their deposits at the Bank of Canada. For 1929 (before the establishment of the Bank of Canada) they represent the totals of the banks' holdings of gold and coin in Canada, Dominion notes, and that part of their deposits in the Central Gold Reserves not required against their note issues.

17.—Principal and Total Assets of Individual Chartered Banks, 1929 and 1935-38.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Bank.	Year.	Cash Reserve against Canadian Deposits.[1]	Total Securities.	Total Loans.	Total Assets.
		$	$	$	$
Bank of Montreal	1929	86,400,000	130,941,236	581,302,970	913,759,043
	1935	65,400,000	349,672,401	266,878,000	766,144,449
	1936	72,200,000	420,732,431	220,222,292	797,418,203
	1937	74,800,000	451,446,479	231,442,795	843,559,930
	1938	71,600,000	440,267,982	245,738,502	851,843,235
Bank of Nova Scotia	1929	18,400,000	44,107,378	172,881,551	275,257,022
	1935	23,400,000	103,828,021	110,217,442	277,368,870
	1936	20,400,000	123,250,165	105,196,805	290,605,674
	1937	21,200,000	117,296,803	116,505,352	297,863,823
	1938	23,000,000	123,262,557	113,745,078	305,196,111
Bank of Toronto	1929	8,700,000	17,633,621	89,012,432	134,485,442
	1935	11,000,000	43,941,167	51,748,891	121,582,723
	1936	11,500,000	58,430,476	45,543,097	133,018,556
	1937	12,700,000	65,362,279	47,498,717	141,847,481
	1938	14,600,000	69,015,109	46,781,406	145,714,429
Banque Provinciale du Canada	1929	1,200,000	10,203,136	33,956,608	54,648,363
	1935	2,400,000	20,044,145	18,463,790	48,383,082
	1936	3,000,000	23,813,904	16,748,284	50,954,098
	1937	4,500,000	26,213,729	17,419,458	55,310,698
	1938	5,100,000	27,176,678	19,717,569	58,545,562
Canadian Bank of Commerce	1929	40,000,000	86,446,466	498,345,544	737,542,966
	1935	46,500,000	206,399,787	253,387,099	585,971,609
	1936	45,600,000	255,564,528	233,933,735	618,364,951
	1937	46,300,000	271,802,611	240,530,574	646,200,637
	1938	49,900,000	279,967,984	231,775,730	646,969,476
Royal Bank of Canada	1929	38,300,000	126,757,074	614,062,764	949,919,252
	1935	42,000,000	192,962,019	379,979,253	750,717,195
	1936	44,400,000	283,617,114	338,870,903	817,847,875
	1937	49,400,000	323,108,273	349,453,135	869,211,590
	1938	53,700,000	321,915,852	342,317,904	864,199,597
Dominion Bank	1929	7,700,000	20,378,753	99,205,694	150,976,550
	1935	8,300,000	36,766,116	62,975,908	126,554,150
	1936	10,200,000	49,856,736	56,988,446	135,785,956
	1937	9,500,000	53,952,829	59,671,160	141,619,393
	1938	11,800,000	55,808,860	56,527,867	142,288,383
Banque Canadienne Nationale	1929	4,400,000	39,444,192	90,376,497	155,406,098
	1935	8,300,000	49,179,738	54,918,167	128,034,699
	1936	8,600,000	61,094,262	50,519,670	137,442,533
	1937	10,100,000	55,143,091	63,037,116	145,750,652
	1938	11,100,000	54,319,008	67,474,078	150,073,389
Imperial Bank of Canada	1929	7,300,000	21,818,113	96,859,437	148,644,987
	1935	7,700,000	36,690,525	75,599,203	137,764,752
	1936	8,600,000	49,172,455	70,102,061	147,179,035
	1937	10,700,000	54,932,510	72,434,899	157,036,305
	1938	10,300,000	57,871,212	74,455,372	162,228,588
Weyburn Security Bank[2]	1929	200,000	1,165,832	3,178,206	6,349,160
Barclays Bank (Canada)	1929[3]	100,000	358,012	197,405	4,437,434
	1935	600,000	4,867,734	2,263,072	14,056,175
	1936	500,000	5,276,920	2,432,507	15,889,882
	1937	700,000	7,112,790	2,581,017	18,686,623
	1938	1,000,000	10,061,580	2,159,099	21,649,810
Totals	**1929**	**212,000,000**	**499,015,138**	**2,279,247,504**	**3,528,468,027**
	1935	**215,600,000**	**1,044,351,653**	**1,276,430,825**	**2,956,577,704**
	1936	**225,000,000**	**1,330,808,991**	**1,140,557,800**	**3,144,506,763**
	1937	**239,900,000**	**1,426,371,394**	**1,200,574,223**	**3,317,087,132**
	1938	**252,100,000**	**1,439,666,822**	**1,200,692,605**	**3,348,708,580**

---

[1] Excluding minor amounts of gold carried in such reserves. See also text immediately preceding this table. [2] Absorbed by the Imperial Bank of Canada May 1, 1931. [3] Four-month averages. Bank commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

18.—Principal and Total Liabilities of Individual Chartered Banks, 1929 and 1935-38.

NOTE.—The statistics in this table are averages computed from the twelve monthly returns in each year.

Bank.	Year.	Notes in Circulation.	Deposit Liabilities.			Liabilities to Shareholders.	Total Liabilities.
			Government.	Public.	Inter-Bank.		
		$	$	$	$	$	$
Bank of Montreal..	1929	44,588,405	53,303,709	680,631,822	30,303,442	70,446,677	908,926,178
	1935	29,849,273	23,491,810	617,001,769	9,486,070	74,000,000	764,351,694
	1936	28,711,578	25,252,446	647,936,495	9,557,704	74,250,000	795,463,714
	1937	24,246,142	38,833,093	679,048,576	12,511,120	75,000,000	842,093,963
	1938	22,457,550	36,021,636	692,210,561	12,892,138	75,000,000	850,271,288
Bank of Nova Scotia...........	1929	15,956,549	3,061,797	202,312,043	6,968,960	30,000,000	272,704,813
	1935	10,771,142	2.957,607	215,204,121	4,105,639	36,000,000	276,534,562
	1936	10,101,797	5,446,076	225,436,635	4,869,675	36,000,000	289,797,351
	1937	9,800,871	2,565,548	237,225,243	4,427,098	36,000,000	296,815,820
	1938	9,337,665	4,096,324	243,885,881	4,818,185	36,000,000	304,153,257
Bank of Toronto...	1929	8,334,322	1,058,293	100,825,532	4,301,318	14,127,164	132,734,214
	1935	5,260,483	1,914,259	94,232,159	2,500,251	15,000,000	120,647,696
	1936	4,680,577	3,043,809	103,774,815	3,134,582	15,000,000	132,023,164
	1937	4,225,007	2,684,423	112,252,400	3,537,407	15,000,000	140,353,623
	1938	3,961,319	2,803,875	116,212,605	4,408,036	15,000,000	143,752,583
Banque Provinciale du Canada.......	1929	4,464,714	425,790	42,296,216	121,181	5,500,000	54,146,698
	1935	3,602,388	245,491	38,919,770	45,940	5,000,000	48,052,045
	1936	3,498,552	232,101	41,795,210	59,358	5,000,000	50,652,813
	1937	3,253,591	1,515,086	45,046,361	97,644	5,000,000	55,022,562
	1938	2,965,134	2,417,226	47,135,326	144,861	5,000,000	58,236,725
Canadian Bank of Commerce.......	1929	33,352,567	11,530,442	529,141,722	53,207,388	55,343,749	731,593,634
	1935	25,348,088	14,619,635	466,714,142	10,233,069	50,000,000	584,120,623
	1936	24,691,592	15,432,633	496,360,221	11,366,466	50,000,000	616,580,515
	1937	22,294,347	17,766,683	518,257,897	13,767,952	50,000,000	643,936,683
	1938	18,250,316	17,078,129	526,457,708	14,683,516	50,000,000	644,930,263
Royal Bank of Canada..........	1929	41,105,812	23,341,461	700,120,040	33,889,308	68,142,960	944,796,101
	1935	30,894,509	14,668,783	614,911,650	10,559,813	55,000,000	748,444,778
	1936	30,414,628	18,790,155	677,279,767	12,096,293	55,000,000	815,579,803
	1937	29,431,462	15,695,540	726,481,376	14,886,475	55,000,000	866,173,511
	1938	27,126,023	18,691,618	725,013,715	14,624,668	55,000,000	861,061,632
Dominion Bank....	1929	7,994,871	1,890,531	107,612,958	6,009,296	15,638,582	150,041,996
	1935	6,264,324	1,343,678	97,065,461	3,234,575	14,000,000	125,952,174
	1936	6,159,670	1,816,717	106,075,402	3,192,315	14,000,000	135,145,017
	1937	5,779,618	1,964,018	111,797,450	3,498,397	14,000,000	140,886,800
	1938	5,273,824	2,065,475	112,502,498	4,182,107	14,000,000	141,459,442
Banque Canadienne Nationale........	1929	11,796,049	3,117,266	115,948,289	1,079,893	12,598,742	153,806,492
	1935	6,660,373	1,653,758	104,903,295	1,051,327	12,000,000	127,372,211
	1936	4,825,287	1,732,259	116,279,220	1,143,784	12,000,000	136,841,502
	1937	5,145,059	1,089,900	123,767,079	2,065,425	12,000,000	144,989,351
	1938	4,714,484	1,358,935	127,909,329	2,313,814	12,000,000	149,203,346
Imperial Bank of Canada..........	1929	10,150,422	4,484,691	110,927,178	3,602,427	15,000,000	146,916,789
	1935	6,704,185	3,757,551	106,821,368	2,803,772	15,000,000	136,675,412
	1936	6,114,146	5,338,989	115,499,134	2,920,199	15,000,000	146,155,207
	1937	5,747,553	7,793,619	122,375,207	3,826,475	15,000,000	156,020,052
	1938	5,438,889	9,682,274	125,321,823	4,814,740	15,000,000	161,225,972
Weyburn Security Bank[1]...........	1929	511,116	138,064	4,415,648	45,729	774,560	6,258,719
Barclays Bank (Canada)......	1929[2]	108,607	Nil	493,097	2,844,367	1,000,000	4,449,695
	1935	289,337	138,598	6,196,018	5,078,168	2,250,000	14,049,157
	1936	309,479	82,734	7,290,779	4,950,378	2,250,000	15,883,146
	1937	335,484	41,407	9,329,507	5,595,367	2,250,000	18,679,288
	1938	345,289	174,043	12,647,953	5,418,857	2,250,000	21,640,397
Totals.........	**1929**	**178,291,030**	**102,352,044**	**2,594,395,813**	**140,477,064**	**287,905,767**	**3,503,408,865**
	1935	**125,644,102**	**64,791,170**	**2,361,969,753**	**49,098,624**	**278,250,000**	**2,946,200,352**
	1936	**119,507,306**	**77,167,919**	**2,537,727,678**	**53,290,754**	**278,500,000**	**3,134,122,232**
	1937	**110,259,134**	**89,949,317**	**2,685,581,096**	**64,213,360**	**279,250,000**	**3,304,971,653**
	1938	**99,870,493**	**94,389,535**	**2,729,297,399**	**68,300,922**	**279,250,000**	**3,335,934,905**

[1] Absorbed by the Imperial Bank of Canada, May 1, 1931. [2] Four-month averages. Bank commenced business in September, 1929. The grand totals for 1929 are, however, twelve-month averages for all banks.

Earnings of Canadian Banks.—The chartered banks of Canada are for the most part Dominion-wide institutions, doing business in all parts of the country. Their earnings, therefore, reflect with very considerable faithfulness the fluctuations of general business.

19.—Net Profits of Canadian Banks and Rates of Dividend Paid, for their business years ended 1933-38.

NOTE.—These figures are not strictly comparable owing to variations from year to year in the practices of individual banks and between banks. With the exception of La Banque Provinciale du Canada, the profits for 1936, 1937, and 1938 are shown after deducting Dominion and Provincial Government taxes.

Bank.	1933.		1934.		1935.	
	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.
	$	p.c.	$	p.c.	$	p.c.
Bank of Montreal	4,005,154	8½	4,105,024	8	3,005,212	8
Bank of Nova Scotia	2,035,900	12½	1,850,330	12	1,834,174	12
Bank of Toronto	1,037,922	10	822,499	10	806,391	10
Banque Provinciale du Canada	410,655	6¼	417,366	6	400,843	6
Canadian Bank of Commerce	3,648,832	8½	3,413,654	8	3,389,031	8
Royal Bank of Canada	3,901,649	8½	4,398,217	8	4,340,522	8
Dominion Bank	1,139,202	10	1,151,561	10	901,556[1]	10
Banque Canadienne Nationale	970,350	10	935,823	9[2]	915,790	8
Imperial Bank of Canada	1,204,039	10	1,231,992	10	1,208,079	10
Barclays Bank (Canada)	[3]	-	[3]	-	[3]	-
Totals, Net Profits	**18,353,703**	-	**18,326,466**	-	**16,801,598**[1]	-

Bank.	1936.		1937.		1938.	
	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.	Net Profits.	Dividend Rate.
	$	p.c.	$	p.c.	$	p.c.
Bank of Montreal	3,181,501	8	3,408,328	8	3,398,390	8
Bank of Nova Scotia	1,926,686	12	1,982,140	12	1,980,769	12
Bank of Toronto	1,141,810	10	1,156,372	10	1,163,716	10
Banque Provinciale du Canada	402,678	6	444,410	6	450,427	6
Canadian Band of Commerce	2,909,124	8	2,934,117	8	2,648,975	8
Royal Bank of Canada	3,504,241	8	3,711,379	8	3,696,233	8
Dominion Bank	951,277	10	976,838	10	960,121	10
Banque Canadienne Nationale	727,935	8	774,228	8	780,240	8
Imperial Bank of Canada	962,813	10	967,977	10	961,342	10
Barclays Bank (Canada)	[3]	-	[3]	-	[3]	-
Totals, Net Profits	**15,708,065**	-	**16,355,789**	-	**16,040,213**	-

[1] Revised since the publication of the 1938 Year Book. [2] This bank paid at the rate of 10 p.c. per annum for the first half-year and 8 p.c. for the second. [3] Not reported.

Branches of Chartered Banks.—During the period from 1881 to 1901, the number of chartered banks doing business in Canada under the Bank Act remained almost the same, 36 in 1881 and 1891, and 34 in 1901, but during the present century there has been in banking, as in industry, an era of amalgamations, the number of banks having dropped to 25 in 1913 and to 10 in 1931. That this has been far from involving a curtailment of banking facilities is seen in Table 9, which shows the development of the banking business since 1867, and in Table 20, which compares the number of branch banks existing in Canada at different periods, and shows a growth from 123 at Confederation to 4,083, inclusive of sub-agencies, at Dec. 31, 1930. Since then, owing to the shrinkage in commercial activities as a result of the depression, some unprofitable branches have been closed and the total has declined to 3,332, exclusive of 144 branches and agencies in other countries, as at Dec. 31, 1938.

20.—Numbers of Branches of Chartered Banks in Canada, by Provinces, as at Dec. 31, 1868, 1902, 1905, 1920, 1926, 1930, 1935-38.

Province.	1868.	1902.	1905.	1920.[1]	1926.[1]	1930.[1]	1935.[1]	1936.[1]	1937.[1]	1938.[1]
P.E. Island......	Nil	9	10	41	28	28	27	27	27	27
Nova Scotia.....	5	89	101	169	134	138	134	135	134	134
New Brunswick..	4	35	49	121	101	102	97	98	97	98
Quebec..........	12	137	196	1,150	1,072	1,183	1,073	1,069	1,074	1,078
Ontario..........	100	349	549	1,586	1,326	1,409	1,223	1,224	1,209	1,210
Manitoba........	Nil	52	95	349	224	239	184	175	169	164
Saskatchewan....	“	30	87	591	427	447	290	279	248	246
Alberta..........	“			424	269	304	209	200	186	180
British Columbia	2	46	55	242	186	229	190	187	188	190
Yukon...........	Nil	Nil	3	3	3	4	4	4	4	4
Totals.......	**123**	**747**	**1,145**	**4,676**	**3,770**	**4,083**	**3,431**	**3,398**	**3,336**	**3,332**[2]

---

[1] Includes sub-agencies for receiving deposits for the banks employing them. [2] Includes one in N.W.T.

Table 21 gives the numbers of branches of the various banks, by provinces, as at Dec. 31, 1938, while Table 22 presents the statistics of branches of Canadian banks doing business outside Canada, an extension of Canadian banking (more especially to Newfoundland and the West Indies) which proceeded very rapidly in the War and early post-War period, rising to a total of 206 in 1921. Since then this number has gradually declined to 144 branches and sub-agencies in 1938.

21.—Numbers of Branches of Individual Canadian Chartered Banks in each Province and Outside Canada as at Dec. 31, 1938.

Note.—This table does not include sub-agencies which numbered 601 in 1938, including 3 outside Canada.

Bank.	P.E. Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.	Outside Canada.	Total.
Bank of Montreal......................	1	13	13	109	190	28	34	43	46	2	10	489
Bank of Nova Scotia..................	8	36	35	21	124	7	15	9	6	Nil	39	300
Bank of Toronto.......................	Nil	Nil	Nil	15	105	11	24	7	9	“	Nil	171
Banque Provinciale du Canada..........	3	“	13	105	14	Nil	Nil	Nil	Nil	“	“	135
Canadian Bank of Commerce...........	6	18	6	59	233	35	56	41	62	3	13	532
Royal Bank of Canada.................	6	63	22	77	223	57	79	45	47	Nil	76	695
Dominion Bank.........................	Nil	Nil	1	9	98	12	4	3	4	“	2	133
Banque Canadienne Nationale..........	“	“	Nil	201	12	4	2	5	Nil	“	1	225
Imperial Bank of Canada..............	“	“	“	4	121	8	28	21	11	“	Nil	193
Barclays Bank (Canada)...............	“	“	“	1	1	Nil	Nil	Nil	Nil	“	“	2
Totals.....................	**24**	**130**	**90**	**601**	**1,121**	**162**	**242**	**174**	**185**	**5**	**141**	**2,875**

22.—Numbers of Branches of each of the Canadian Chartered Banks in Other Countries, with their Locations, as at Dec. 31, 1937 and 1938.

Bank and Location.	1937.	1938.	Bank and Location.	1937.	1938.
Bank of Montreal—			Royal Bank of Canada—		
Newfoundland	5[1]	5[2]	Newfoundland	5	5
England	2	2	England	2	2
United States	3	3	British West Indies	11	11
Bank of Nova Scotia—			United States	1	1
			Cuba	23	23
Newfoundland	12	12	Puerto Rico, etc	11	11
England	1	1	France (auxiliary)	1	1
British West Indies	12[1]	12[1]	Spain	1	1
United States	3	3	Central and South America	23	21
Cuba	8	8	Dominion Bank—		
Puerto Rico, etc	3	3	England	1	1
Canadian Bank of Commerce—			United States	1	1
Newfoundland	2	2			
England	1	1	Banque Canadienne Nationale—		
British West Indies	3	3			
United States	5	5	France	1	1
Cuba	1	1			
St. Pierre and Miquelon	1	1	**Totals**	**143[2]**	**141[3]**

[1] Exclusive of one sub-agency. [2] Exclusive of two sub-agencies. [3] Exclusive of three sub-agencies.

Section 6.—Government and Other Savings Banks.

In a comparatively new country where capital is relatively scarce, it is natural that the banks that finance the business institutions should also absorb the bulk of the people's savings for use in promoting the business of the country. Thus, in Canada the great bulk of the current savings of the people is found in the savings or notice deposits of the Canadian chartered banks, the annual average figures of which are given for recent years in Table 9 of this chapter, the 1938 average being $1,630,481,857. Further, the current savings of the Canadian people are going very largely into the purchase of life insurance, the total premiums paid in the single year 1937 aggregating $205,686,107. In comparison with the enormous figures of notice deposits in chartered banks and with total insurance in force, the deposits in the special savings banks are comparatively small, but are none the less significant.

There are three distinct types of savings bank in Canada at the present time, in addition to the savings departments of the chartered banks and of trust and loan companies. First, there is the Post Office Savings Bank, the deposits in which are a direct obligation of the Dominion Government. Secondly, there are Provincial Government savings banking institutions in Ontario and in Alberta, where the depositor becomes a direct creditor of the province. Thirdly, there are, in the province of Quebec, two important savings banks, the Montreal City and District Savings Bank and the Caisse d'Economie de Notre-Dame de Québec, established under Dominion legislation and making monthly reports to the Department of Finance.

Dominion Government Savings Banks.—Prior to 1929 there were two classes of Dominion Government savings bank in Canada, the Post Office Savings Bank under the Post Office Department, and the Dominion Government Savings Bank attached to the Department of Finance. The former was established under the Post Office Act of 1867 (31 Vict., c. 10) in order to "enlarge the facilities now available for the deposit of small savings, to make the Post Office available for that purpose, and to give the direct security of the Dominion to every depositor for repayment of all money deposited by him together with the interest due thereon". Branches of the Government Savings Bank proper, under the authority of the Finance Department, were established in the leading cities of Canada under the management of the Assistant Receivers General and in other places, in the provinces of Nova Scotia and New Brunswick, under managers appointed by the Governor in Council. The Dominion Government Savings Bank was amalgamated with the Post Office Savings Bank in 1929. Historical statistics for both systems will be found in Table 23 and more detailed figures covering the latest six years in Table 24.

23.—Deposits with Dominion Government Savings Banks,[1] representative years 1868-1900 and 1905-38, inclusive.

NOTE.—Figures for intermediate years will be found on p. 833 of the 1926 Year Book.

Fiscal Year.	Post Office Savings Bank.	Dominion Government Savings Bank.	Fiscal Year.	Post Office Savings Bank.	Dominion Government Savings Bank.
	$	$		$	$
1868	204,589	1,483,219	1917	42,582,479	13,633,610
1870	1,588,849	1,822,570	1918	41,283,479	12,177,283
1875	2,926,090	4,245,091	1919	41,654,960	11,402,098
1880	3,945,669	7,107,287	1920	31,605,594	10,729,218
1885	15,090,540	17,888,536	1921	29,010,619	10,150,189
1890	21,990,653	19,021,812	1922	24,837,181	9,829,653
1895	26,805,542	17,644,956	1923	22,357,268	9,433,839
1900	37,507,456	15,642,267	1924	25,156,449	9,055,091
1905	45,368,321	16,649,136	1925	24,662,060	8,949,073
1906	45,736,488	16,174,134	1926	24,035,669	8,794,870
1907[2]	47,453,228	15,088,584	1927	23,402,337	8,519,706
1908	47,564,284	15,016,871	1928	23,463,210	7,640,566
1909	45,190,484	14,748,436	1929	28,375,770	[3]
1910	43,586,357	14,677,872	1930	26,086,036	[3]
1911	43,330,579	14,673,752	1931	24,750,227	[3]
1912	43,563,764	14,655,564	1932	23,919,677	[3]
1913	42,728,942	14,411,541	1933	23,920,915	[3]
1914	41,591,286	13,976,162	1934	23,158,919	[3]
1915	39,995,406	14,006,158	1935	22,547,006	[3]
1916	40,008,418	13,519,855	1936	22,047,287	[3]
			1937	21,879,593	[3]
			1938	22,587,233	[3]

[1] Not including Provincial Government Savings Banks. [2] For 1907 and subsequent years the fiscal year ended Mar. 31; previous to 1907 the year ended June 30. [3] Included in Post Office Savings Bank.

24.—Summary of the Financial Business of the Post Office Savings Bank, Mar. 31, 1933-38.

Item.	1933.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$	$
Deposits during year	3,669,427	2,565,470	2,223,907	2,292,326	2,830,193	3,671,298
Interest on deposits	683,814	580,946	510,592	435,558	426,535	432,436
Totals, cash and interest	4,353,241	3,146,415	2,734,499	2,727,884	3,256,728	4,103,734
Withdrawals	4,352,003	3,908,411	3,346,412	3,227,602	3,424,422	4,396,094
At credit of depositors	23,920,915	23,158,919	22,547,006	22,047,287	21,879,593	22,587,233

Provincial Government Savings Banks.—Institutions for the deposit of savings are operated by the Provincial Governments of Ontario and Alberta, while a similar institution was in operation in Manitoba from 1924 to 1932 when the depositors' accounts were taken over by the chartered banks.

Ontario.—In the session of 1921, the Legislature of Ontario authorized the establishment of the Province of Ontario Savings Office, and in March, 1922, the first branches were opened. Interest at the rate of 1 and 1½ p.c. per annum compounded half-yearly is paid on accounts. The deposits are repayable on demand. Total deposits on Jan. 31, 1939, were over $41,900,000, and the number of depositors at that date was over 114,000. Twenty-six branches are in operation throughout the province.

Alberta.—In Alberta the Provincial Treasury receives savings deposits and issues demand savings certificates bearing interest at 2 p.c., or term certificates for one, two, or three years, in denominations of $25 and upwards, bearing interest at 2 p.c. for one year and 2¼ p.c. for two or three years. The total amount in savings certificates on Dec. 31, 1938, was $6,350,451, made up of $3,835,375 in demand certificates and $2,515,076 in term certificates.

Other Savings Banks.—The Montreal City and District Savings Bank, founded in 1846 and now operating under a charter of 1871, had on Dec. 31, 1938, a paid-up capital and reserve of $4,750,000, savings deposits of $65,044,916, and total liabilities of $67,844,910. Total assets amounted to $72,991,081 including over $54,000,000 of Dominion, provincial, and municipal securities. The Caisse d'Economie de Notre-Dame de Québec, founded in 1848 under the auspices of the St. Vincent de Paul Society, incorporated by Act of the Canadian Legislature in 1855 and given a Dominion charter by 34 Vic., c. 7, had on Dec. 31, 1938, savings deposits of $13,936,501, a paid-up capital and reserve of $2,750,000, and total assets of $17,346,254.

The co-operative people's banks of Quebec (256 reported to the Provincial Government in 1937) are also an important element in promoting thrift and assisting business in that province. Thus on Dec. 31, 1937, savings deposits in these banks amounted to $9,768,984, while the amount on loan was $10,668,901. Loans granted in 1937 numbered 17,639 amounting to $4,310,777. Profits realized amounted to $519,714. (See also p. 826 of this volume.)

25.—Deposits in the Montreal City and District Bank and the Caisse d'Economie de Notre-Dame de Québec, representative years 1868-1900, and 1905-38, inclusive.

NOTE.—Figures for intermediate years will be found on p. 833 of the 1926 Year Book.

Fiscal Year.	Deposits.	Fiscal Year.	Deposits.	Fiscal Year.	Deposits.
	$		$		$
1868	3,369,799	1911	32,239,620	1925	65,837,254
1870	5,369,103	1912	34,770,386	1926	67,241,344
1875	6,611,416	1913	39,526,755	1927	69,940,351
1880	6,681,025	1914	40,133,351	1928	72,695,422
1885	9,191,895	1915	39,110,439	1929	70,809,603
1890	10,908,987	1916	37,817,474	1930	68,846,366
1895	13,128,483	1917	40,405,037	1931	69,820,422
1900	17,425,472	1918	44,139,978	1932	68,683,324
1905	25,050,966	1919	42,000,543	1933	68,113,501
1906	27,399,194	1920	46,799,877	1934	66,673,219
1907[1]	28,359,618	1921	53,118,053	1935	66,496,595
1908	28,927,248	1922	58,576,775	1936	69,665,415
1909	29,867,973	1923	59,327,961	1937	73,450,133
1910	32,239,620	1924	64,245,811	1938	77,260,433

[1] For 1907 and subsequent years the fiscal year ended Mar. 31; previous to 1907 the year ended June 30.

PART II.—MISCELLANEOUS COMMERCIAL FINANCE.

Section 1.—Loan and Trust Companies.*

The Canada Year Book, 1934-35, presents at p. 993 an outline of the development of loan and trust companies in Canada from 1844 to 1913.

The laws relating to trust and loan companies were revised by the Loan and Trust Companies Acts of 1914 (4-5 Geo. V, cc. 40 and 55), with the result that the statistics of provincially incorporated loan and trust companies ceased to be collected. In Table **1**, however, certain summary statistics of provincial companies have been supplied for 1937 by courtesy of those companies and are included in order to complete the picture for loan and trust companies throughout Canada. It is estimated that more than 90 p.c. of the business of provincial companies is represented in the figures, so that they may be accepted as fairly inclusive and representative of the volume of business transacted as compared with Dominion registered companies. The statistics of Tables **2** and **3** refer only to those companies operating under Dominion charter, except that, beginning in 1925, the statistics of loan companies and trust companies incorporated by the province of Nova Scotia, and brought by the laws of that province under the examination of the Dominion Department of Insurance, have been included as well as those for trust companies in New Brunswick since 1934 in Table **3**. These historical series start with the year 1920, at which time the Dominion Department of Insurance took over the administration of the legislation concerning Dominion trust and loan companies—the Department of Finance had previously exercised supervision of their activities.

As indicating the progress of the aggregate of loan company business in Canada, it may be stated that the book value of the assets of all loan companies rose from $188,637,298 in 1922 to $213,649,794 in 1931, but declined to $193,175,022 in 1937. The assets of trust companies (not including trust, estates, and agency funds, which cannot be regarded as assets in the same sense as company and guaranteed funds) increased from $154,202,165 in 1928 to $241,120,562 in 1937. In the former year, the total of trust, estates, and agency funds administered amounted to $1,077,953,643 and in the latter year to $2,558,856,368. (Table **1**.)

Functions of Loan Companies.—The principal function of loan companies is the lending of funds on first mortgage security, the money thus made available for development purposes being secured mainly by the sale of debentures to the investing public and by savings department deposits. Of the loan companies operating under provincial charters, the majority conduct loan, savings, and mortgage business, generally in the more prosperous farming communities. The historical statistics published in Table **2** respecting loan companies were revised in 1937 by the separation of the statistics of small loans companies, which are now included in Section 2.

Functions of Trust Companies.—Trust companies act as executors, trustees, and administrators under wills or by appointment, as trustees under marriage or other settlements, as agents or attorneys in the management of the estates of the living, as guardians of minor or incapable persons, as financial agents for municipalities and companies and, where so appointed, as authorized trustees in bankruptcy. Some companies receive deposits, but the lending of actual trust funds is restricted by law. The figures of Table **1** are of particular interest in the case of trust companies, which, on account of the nature of their functions, are mainly provincial institutions, since their chief duties are intimately connected with the matter of probate, which lies within the sole jurisdiction of the provinces.

---

* Revised under the direction of G. D. Finlayson, Superintendent of Insurance, Department of Insurance.

1.—Summary Statistics of the Operations of Dominion and Provincial Loan and Trust Companies in Canada, as at Dec. 31, 1937.

Item.	Provincial Companies.	Dominion Companies.	Total.
Loan Companies—	$	$	$
Book value of assets	56,912,506	136,262,516	193,175,022
Liabilities to the public	28,162,853	100,478,054	128,640,907
Capital Stock—			
Authorized	41,570,775	59,150,000	100,720,775
Subscribed	20,147,063	26,208,300	46,355,363
Paid-up	17,640,959	19,352,276	36,993,235
Reserve and contingency funds	10,621,720	15,048,254	25,669,974
Other liabilities to shareholders	729,659	1,371,416	2,101,075
Total liabilities to shareholders	28,992,338	35,771,946	64,764,284
Net profits realized during year	968,446	925,089	1,893,535
Trust Companies—	$	$	$
Assets (Book Values)—			
Company funds	64,435,443	17,408,307	81,843,750
Guaranteed funds	123,492,136	35,784,676	159,276.812
Totals, Company Funds and Guaranteed Funds	187,927,579	53,192,983	241,120,562
Estates, trust, and agency funds	*2,330,701,359*	*228,155,009*	*2,558,856,368*
Capital Stock—			
Authorized	64,582,600	20,650,000	85,232,600
Subscribed	30,006,617	11,430,370	41,436,987
Paid-up	27,619,335	10,357,757	37,977,092
Reserve and contingency funds	17,202,387	5,311,158	22,513,545
Unappropriated surpluses	3,541,086	431,130	3,972,216
Net profits realized during year	2,765,554	461,834	3,227,388

2.—Classification of Assets and Liabilities of Loan Companies Chartered by the Dominion Government, as at Dec. 31, 1920-37.

NOTE.—Figures given in this table do not include small loans companies (see Section 2 of this chapter, pp. 963-964) and differ on this account from those published in Year Books prior to the 1938 edition.

Year.	ASSETS.						
	Real Estate.[1]	Mortgages on Real Estate.	Collateral Loans.	Bonds, Debentures, Stocks and other Company Property.	Cash on Hand and in Banks.	Interest, Rents, etc., Due and Accrued.	Total.[2]
Dec. 31—	$	$	$	$	$	$	$
1920	4,753,049	63,725,084	1,750,128	16,593,932	3,363,877	1,658	90,413,261
1921	4,979,779	67,147,513	1,618,865	15,328,797	4,568,984	2,790,348	96,698,810
1922	5,309,854	69,824,985	1,916,976	16,967,305	4,800,649	2,989,460	102,462,090
1923	5,515,170	73,858,726	1,772,148	16,445,635	3,467,822	3,353,822	104,866,102
1924	4,035,532	71,468,506	1,722,803	18,568,856	3,636,592	2,470,756	101,919,837
1925[3]	3,982,921	79,106,407	1,532,366	20,210,387	3,442,928	2,180,700	110,638,667
1926[3]	4,150,307	89,873,578	1,161,886	18,426,169	4,284,648	2,274,535	120,321,095
1927[3]	3,999,808	102,501,193	1,585,891	18,884,434	5,672,479	2,020,087	134,669,734
1928[3]	4,172,704	105,106,365	2,472,312	17,874,808	3,255,166	1,746,138	134,634,288
1929[3]	6,156,227	103,774,850	2,266,288	17,654,463	3,186,180	1,833,545	134,877,701
1930[3]	7,069,914	105,477,328	2,420,927	20,834,907	4,291,855	2,558,238	142,657,134
1931[3]	8,104,521	106,607,563	1,020,076	23,430,382	3,282,016	3,529,451	147,094,183
1932[3]	8,263,875	102,661,879	491,387	21,521,472	4,527,610	4,366,369	142,886,473
1933[3]	8,860,817	98,357,741	240,069	18,767,937	4,311,894	5,437,535	136,990,422
1934[3]	9,112,878	97,169,985	233,458	21,693,414	4,384,592	6,532,256	140,147,053
1935[3]	9,527,647	96,008,289	306,183	20,572,693	3,670,060	6,926,558	137,994,145
1936[3]	9,770,965	97,622,787	271,660	21,175,454	3,496,046	3,928,038	137,210,511
1937[3]	10,593,241	97,050,041	134,333	20,371,285	3,303,863	3,891,070	136,262,516

Year.	LIABILITIES.							
	Liabilities to Shareholders.			Liabilities to the Public.				
	Capital Paid Up.	Reserve Funds.	Total.[4]	Debentures and Debenture Stock.		Deposits.	Interest Due and Accrued.	Total.[5]
				Canada.	Elsewhere and Sundries.			
Dec. 31—	$	$	$	$	$	$	$	$
1920	24,062,521	13,442,364	39,110,640	16,982,032	18,451,054	15,257,840	[6]	51,302,620
1921	25,750,966	14,278,619	40,629,689	17,682,083	20,265,766	15,868,926	480,547	54,651,433
1922	25,241,600	14,740,834	40,013,363	20,360,480	22,390,990	16,910,558	499,661	60,386,903
1923	24,939,622	14,879,516	41,239,712	22,667,861	24,315,010	15,854,029	577,460	63,600,093
1924	22,592,057	13,734,681	37,122,138	25,426,434	21,901,431	15,970,077	543,131	63,989,554
1925[3]	23,632,474	14,555,603	38,461,375	30,052,139	21,600,001	18,660,122	538,755	71,066,398
1926[3]	23,498,336	14,861,280	38,977,937	36,613,088	21,572,810	21,316,150	663,987	80,447,480
1927[3]	20,699,710	14,867,432	38,596,121	47,818,386	19,965,321	27,019,323	868,694	95,895,897
1928[3]	20,038,831	14,112,114	36,067,816	51,269,133	15,292,362	30,671,257	940,528	98,408,186
1929[3]	20,192,840	14,427,948	35,694,166	52,857,277	14,813,287	29,602,789	941,795	98,482,375
1930[3]	20,333,966	14,615,844	35,634,733	58,058,682	15,063,313	31,581,913	978,602	105,896,436
1931[3]	20,407,157	14,717,152	35,765,429	63,158,214	14,837,565	30,823,662	1,027,388	110,280,658
1932[3]	19,174,463	14,724,620	35,455,456	61,959,437	14,858,798	29,418,924	989,303	107,431,181
1933[3]	19,253,370	15,182,125	35,855,209	60,483,299	15,161,505	24,287,270	996,132	101,120,948
1934[3]	19,373,841	15,800,582	36,599,186	61,157,372	16,222,139	24,908,363	1,004,063	103,536,768
1935[3]	19,393,907	15,618,715	36,404,095	59,386,546	14,530,516	26,556,302	898,830	101,578,778
1936[3]	19,361,368	15,262,697	36,005,271	58,918,941	14,939,518	26,250,954	860,115	101,194,543
1937[3]	19,352,276	15,048,254	35,771,946	57,506,233	14,977,437	26,966,644	765,435	100,478,054

---

[1] Book value of real estate for companies' use and other real estate. [2] Includes other assets.
[3] Includes statistics of loan companies chartered by the Government of Nova Scotia, but inspected by the Dominion Department of Insurance. [4] Includes other liabilities to shareholders. [5] Includes other liabilities to the public. [6] Not shown separately.

3.—Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-37.

Year.	COMPANY FUNDS—ASSETS.							
	Loans.		Real Estate.	Government, Municipal, School, and Other Securities Owned.	Stocks.	Cash on Hand and in Banks.	All Other Assets Belonging to the Companies.	Total Assets of the Companies.
	On Real Estate.	On Stocks and Securities.						
	$	$	$	$	$	$	$	$
Dec. 31—								
1920	4,736,064	512,800	701,564	2,500,942	349,294	576,125	847,463	10,224,252
1921	4,408,914	344,302	908,618	2,400,914	253,779	603,618	1,317,785	10,237,930
1922	5,254,434	391,475	973,022	1,584,234	264,186	473,687	1,412,205	10,353,243
1923	5,402,752	375,129	1,048,682	1,656,304	292,564	481,672	1,573.406	10,830,509
1924	5,114,753	446,001	1,551,673	1,598,971	336,818	524,368	2,483,675	12,056,259
1925[1]	5,143,123	618,250	1,969,737	2,323,064	432,956	203,431	1,763,355	12,453,916
1926[1]	5,450,907	580,128	2,091,322	2.318.344	477,917	705,064	1,571,595	13,195,277
1927[1]	5,668,574	977,514	2,140,344	1,993,823	494,083	804,469	1,603.906	13,682,713
1928[1]	5,651,201	1,156,698	2,148,354	2,808,630	495,094	917,019	1,589,288	14,766,284
1929[1]	5,652,084	1,121,536	1,959,581	3,228,722	425,077	659,466	1,623,031	14,669,497
1930[1]	5,573,596	1,183,298	2,049,285	3,176,348	458,392	732,025	1,779,338	14,952,282
1931[1]	6,034,794	1,035,169	2,140,792	3,211,183	488,995	551,595	1,996,819	15,459,347
1932[1]	6,057,336	628,586	2,306,950	3,105,079	447,940	773,537	2,042,228	15,361,656
1933[1]	5,413,800	706,146	2,655,924	3,418,374	451,552	624,363	2,081,259	15,351,418
1934[1]	5,034,509	973,532	3,008,327	3,681,872	454,975	667,932	2,080,072	15,901,219
1935[1]	5,162,632	666,465	3,163,130	3,591,823	471,431	1,008,869	1,906,543	15,970,893
1936[1]	5,105,167	884,014	3,304,918	3,960,552	461,014	914,439	1,744,454	16,374,558
1937[1]	5,411,003	971,560	3,734,913	4,008,247	657,507	724,846	1,900,231	17,408,307

	GUARANTEED FUNDS—ASSETS.						
	Loans.		Government, Municipal, School, and Other Securities Owned.	Stocks.	Cash on Hand and in Banks.	All Other Assets.	Total Assets Held Against Guaranteed Funds.
	On Real Estate	On Stocks and Securities.					
	$	$	$	$	$	$	$
Dec. 31—							
1920	4,247,183	Nil	2,437,106	329,801	853,832	941,588	8,809,510
1921	4,159,355	"	2,508,197	Nil	550,011	1,556,622	8,774,185
1922	5,241,872	"	1,823,290	150,951	546,929	1,022,363	8,785,405
1923	8,552,388	220,717	1,010,225	137,791	251,508	476,375	10,649,004
1924	12,278,138	345,892	989,050	137,791	404,999	152,867	14,308,737
1925[1]	12,897,930	490,528	1,463,920	85,062	636,526	323,373	15,897,339
1926[1]	14,005,093	1,334,078	1,488,070	85,062	813,344	253.765	17,979,412
1927[1]	16,596,737	2,407,158	1,978,136	85,062	1,067,790	329,870	22,464,753
1928[1]	17,095,284	2,337,415	2,376,726	85,062	1,911,962	299,275	24,105,724
1929[1]	18,447,949	1,804,750	2,689,069	3,288	1,132,633	387,574	24,465,263
1930[1]	19,513,691	2,075,322	2,491,089	Nil	1,948,592	380,135	26,408,829
1931[1]	20,812,176	887,015	2,598,587	18,300	919,982	482,159	25,718,219
1932[1]	19,336,735	1,480,454	3,286,467	Nil	688,136	431,121	25,222,913
1933[1]	19,141,920	2,551,966	4,072,131	23,400	1,084,150	523,140	27,396,707
1934[1]	19,911,247	3,913,332	5,771,085	Nil	1,444,847	610,546	31,651,057
1935[1]	20,123,641	4,004,017	8,542,061	"	1,345,204	742,469	34,757,392
1936[1]	20,474,810	5,748,256	7,300,519	"	1,199.866	733,156	35,456,607
1937[1]	21,926,852	3,172,609	8,525,407	"	1,486,606	673,202	35,784,676

For footnotes, see end of table, p. 963.

3.—Classification of Assets and Liabilities of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-37—concluded.

Year.	LIABILITIES.							
	Company Funds.						Guaranteed Funds.	
	Liabilities to Shareholders.				Liabilities to the Public.	Total.	Principal.	Total.
	Capital Paid Up.	Reserve Funds.	Other Liabilities:	Total.	Taxes, Borrowed Money, etc.			
Dec. 31—	$	$	$	$	$	$	$	$
1920.....	7,465,376	1,851,028	263,716	9,580,120	422,368	10,002,488	8,673,539	8,809,510[2]
1921.....	7,532,777	1,746,815	126,279	9,405,871	501,460	9,907,331	8,424,128	8,549,642[2]
1922.....	7,678,401	1,912,123	46,068	9,636,592	329,827	9,966,419	8,473,720	8,600,588[2]
1923.....	7,772,749	1,908,887	5,674	9,687,310	832,724	10,520,034	10,306,767	10,484,863[2]
1924.....	8,796,479	1,918,567	169,390	10,884,436	766,783	11,651,219	14,027,120	14,160,703[2]
1925[1]....	9,523,618	2,261,890	184,153	11,969,661	232,813	12,202,474	15,897,339	15,897,339
1926[1]....	9,666,449	2,313,464	393,932	12,373,845	580,380	12,954,225	17,979,412	17,979,412
1927[1]....	9,824,031	2,653,673	443,377	12,921,081	571,279	13,492,360	22,464,753	22,464,753
1928[1]....	10,424,249	2,877,766	549,905	13,851,920	741,364	14,593,284	24,105,724	24,105,724
1929[1]....	10,512,879	3,325,020	257,288	14,095,187	325,914	14,421,101	24,465,263	24,465,263
1930[1]....	10,260,025	3,431,538	718,240	14,409,803	294,897	14,704,700	26,408,829	26,408,829
1931[1]....	10,493,608	3,478,889	629,215	14,601,712	464,719	15,066,431	25,718,221	25,718,221
1932[1]....	10,601,822	3,461,760	457,518	14,521,100	368,279	14,889,379	25,222,913	25,222,913
1933[1]....	10,630,336	3,555,585	444,302	14,630,223	206,372	14,836,595	27,396,708	27,396,708
1934[1]....	10,652,618	3,746,260	591,103	14,989,981	246,466	15,236,447	31,651,057	31,651,057
1935[1]....	10,590,333	3,744,068	860,284	15,194,685	121,461	15,316,146	34,757,391	34,757,391
1936[1]....	9,803,722	4,935,216	999,627	15,738,565	139,496	15,878,061	35,456,607	35,456,607
1937[1]....	10,357,757	5,311,158	723,117	16,392,032	178,617	16,570,649	35,784,676	35,784,676

[1] Includes statistics of trust companies chartered by the Government of Nova Scotia but inspected by the Dominion Department of Insurance for the years 1925-33, inclusive, and by the Governments of Nova Scotia and New Brunswick for 1934-37, inclusive.

[2] Includes interest due and accrued.

4.—Amount of Estates, Trust, and Agency Funds of Trust Companies Chartered by the Dominion Government, as at Dec. 31, 1920-37.

Year.	Estates, Trust, and Agency Funds.	Year.	Estates, Trust, and Agency Funds.
Dec. 31—	$	Dec. 31—	$
1920................................	57,225,303	1929................................	210,005,726
1921................................	79,252,639	1930................................	205,282,593
1922................................	92,449,298	1931................................	215,698,469
1923................................	102,764,835	1932................................	215,702,235
1924................................	123,082,289	1933................................	225,484,151
1925................................	131,420,502	1934................................	230,230,283
1926................................	139,777,235	1935................................	242,594,310
1927................................	161,040,061	1936................................	226,024,454
1928................................	202,655,185	1937................................	228,155,009

Section 2.—Small Loans Companies.

There have been incorporated in recent years, by the Parliament of Canada, a number of companies which make small loans, usually not exceeding five hundred dollars each, on the promissory notes of the borrowers and additionally secured in most cases by endorsements or chattel mortgages. While small loans companies may, under their charter powers, make loans on the security of real estate, actually they have made but very few of such loans. As the business of these companies has now reached considerable proportions, the figures relating thereto are now separated from those of the loan companies proper and are no longer included in Table 2. The figures relating to the assets and liabilities of the three companies of this class that have commenced operations are shown in Table 5.

5.—Classification of Assets and Liabilities of Small Loans Companies Chartered by the Dominion Government, as at Dec. 31, 1928-37.

Year.	ASSETS.			
	Loans Receivable.	Cash on Hand and in Banks.	Other Assets.	Total Assets.
	$	$	$	$
Dec. 31—				
1928	138,635	3,597	17,007	159,239
1929	434,432	9,621	36,341	480,394
1930	598,275	21,814	31,551	651,640
1931	777,414	13,020	36,939	827,373
1932	644,339	22,125	13,449	679,913
1933	1,228,180	327,760	14,019	1,569,959
1934	2,353,862	284,761	22,111	2,660,734
1935	2,962,580	194,406	30,403	3,187,389
1936	4,145,066	214,363	32,961	4,392,390
1937	4,875,596	261,864	37,092	5,174,552

Year.	LIABILITIES.									
	Liabilities to Shareholders.					Liabilities to the Public.				Total Liabilities.
	General Reserve.	Reserve for Losses.	Capital Paid Up.	Other Liabilities.	Total.	Borrowed Money.	Unearned Income.	Other Liabilities.[1]	Total.	
	$	$	$	$	$	$	$	$	$	$
Dec. 31—										
1928	Nil	1,757	101,000	2,650	105,407	45,000	6,549	397	51,946	157,353
1929	"	10,075	101,000	1,399	112,474	346,924	16,656	1,571	365,151	477,625
1930	"	16,284	141,150	7,418	164,852	450,659	22,211	9,349	482,219	647,071
1931	"	36,028	273,150	3,992	313,170	474,659	24,532	10,759	509,950	823,120
1932	"	14,722	331,600	1,775	348,097	295,930	18,596	12,375	326,901	674,998
1933	"	22,945	976,750	10,871	1,010,566	445,382	96,248	4,075	545,705	1,556,271
1934	"	65,559	976,750	76,518	1,118,827	1,330,797	171,817	17,181	1,519,795	2,638,622
1935	"	91,061	976,750	163,923	1,231,734	1,681,062	222,643	21,742	1,925,447	3,157,181
1936	300,000	146,658	976,750	2,771	1,426,179	2,581,710	315,678	37,559	2,934,947	4,361,126
1937	300,000	220,308	1,001,750	237,643	1,759,701	2,920,840	361,315	95,904	3,378,059	5,137,760

[1] Including taxes.

Section 3.—Sales of Canadian Bonds.

Interesting aspects of public financing and of the investment of capital in Canadian development since 1926 are illustrated by the sales of Canadian bonds by classes, shown in Table 6. (The figures are reproduced from the *Monetary Times Annual.*) In the first part of this table, the bonds sold in each year are divided according to whether the financing was for Dominion or Provincial Governments, or for municipalities, railways, or other corporations, while in the second part, the sales in each year are distributed according to sales in Canada, the United States, and the United Kingdom.

The total sales of Canadian bonds naturally reached a very high mark toward the close of the War, owing to the Dominion Government financing required to cover the War expenditures. However, the total sales were greater in 1936 than in any other year, owing largely to the Dominion Government's conversion loans.

Dominion Government financing through bond sales since 1907 may be divided into three periods: the first from 1908 to 1914, when the money was required largely for internal development of the country, public works, and Government railways; the second from 1915 to 1919, when War expenditures required very large borrowings; and the third since the War, when the issues have been largely required for refunding former loans at lower interest rates and for expenditures in connection with public works and railways.

Provincial bond issues have been on a much larger scale since the War than formerly, probably due to the development of provincially-owned public utilities and of improved highways. Sales of the bonds of Canadian municipalities, on the other hand, were greater in 1913, toward the end of the 'land boom', than they have been in any other year, although sales in 1930 almost reached the record. However, apart from considerations of the increased urbanization of the population there has not been the same marked increase in the average annual sales of municipal bonds in the period since the War, as compared with the period before the War, that is noticeable in the case of provincial bonds.

Sales of corporation bonds, which from 1926 to 1930 had averaged over $257,000,000 per year, dropped to $10,550,000 in 1932, and to $4,385,000 in 1933, this being due largely to the uncertainty of the industrial outlook. Railway bonds also showed a precipitate decline to $12,500,000 in 1932, and fell to $1,000,000 in 1933. From 1934 to 1938 substantial recoveries were shown in the former class, the 1936 figures being particularly high. A change in the method of accounting between the Dominion and the Canadian National Railways partly accounts for the apparent decrease since 1936.

A very striking change has taken place during the present century in the market in which Canadian bond issues are principally sold. Prior to the War, a great part of the capital required for Canadian development came from the United Kingdom, and the major portion of Canadian bond issues was sold there. The outbreak of war temporarily eliminated that market, and Canadians turned largely to the United States for outside capital. However, the great increase in wealth during and since the War has enabled a much greater proportion of public and industrial financing to be done at home, and, beginning with the Victory Loan campaigns, Canadians not only learned how to invest their money in bonds, but had the necessary funds to invest on a large scale in bond issues. In 1938, 92·1 p.c. of all bonds issued were sold in Canada, 3·6 p.c. in the United States, and 4·3 p.c. in the United Kingdom.

6.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1926-38.

(From the *Monetary Times Annual.*)

NOTE.—Figures for 1904-25, inclusive, are given at p. 921 of the 1933 Year Book.

Year.	CLASS OF BOND.					
	Dominion.	Provincial.	Municipal.	Railway.	Corporation.	Total.
	$	$	$	$	$	$
1926	105,000,000	76,633,267	65,020,194	34,500,000	250,919,200	532 072,661
1927	45,000,000	114,795,500	72,742,114	80,000,000	289,680,067	602,217,681
1928	[1]	92,992,500	27,120,588	48,396,000	285,083,000	453,592,088
1929	[1]	119,960,500	98,667,809	199,200,000	243,330,600	661.158,909
1930	140.000,000	160,004.000	109,648,063	137,238,000	220,355,000	767,245,063
1931	858,109,300	126,239,205	85,290.066	121,750,000	59,432,000	1,250,820,571
1932	226,250,000	128,217,000	95,600,632	12,500,000	10,550,000	473,117,632
1933	440,000,000	82,889,000	41,282,513	1,000,000	4,385,000	569,556,513
1934	400,000,000	139,868,000	24,690,132	32,500,000	40,902,696	637,960,828
1935	739,300,000	123,407,000	44,793,200	48,400,000	60,605,700	1,016,505,900
1936	793,000,000	118,735,000	34,356,087	133,000,000	219,983,224	1,299,074,311
1937	919,000,000[2]	174,362,000	52,137,475	30,380,000[2]	89,566,800[2]	1,265,446,275[2]
1938	898,491,666	119,982,000	30,053,386	19,480,000	62,312,500	1,130,319,552

[1] Not reported for this year. [2] Revised since the publication of the 1938 Year Book.

6.—Sales of Canadian Bonds, by Class of Bond and Country of Sale, calendar years 1926-38—concluded.

Year.	DISTRIBUTION OF SALES, BY COUNTRIES.			
	Sold in Canada.	Sold in United States.	Sold in United Kingdom.	Total.
	$	$	$	$
1926	263,862,718	259,209,943	9,000,000	532,072,661
1927	373,637,014	223,714,000	4,866,667	602,217,681
1928	278,080,088	159,512,000	16,000,000	453,592,088
1929	378,395,909	263,654,000	19,109,000	661,158,909
1930	368,868,063	393,632,000	4,745,000	767,245,063
1931	1,090,800,571	155,920,000	4,100,000	1,250,820,571
1932	377,752,632	81,015,000	14,350,000	473,117,632
1933	434,556,513	60,000,000	75,000,000	569,556,513
1934	529,630,828	50,000,000	58,330,000	637,960,828
1935	853,940,900	162,065,000	500,000	1,016,505,900
1936	1,211,824,311	86,000,000	1,250,000	1,299,074,311
1937	1,177,196,275[1]	88,250,000	Nil	1,265,446,275[1]
1938	1,041,477,886	40,175,000	48,666,666	1,130,319,552

[1] Revised since the publication of the 1938 Year Book.

Section 4.—Corporation Dividends.

(From the *Financial Post Business Year Book.*)

The 1938 improvement in Canadian business, as indicated by higher corporate earnings, was reflected in the total annual dividend payments of $325,931,000, compared with $323,724,000 in 1937. The 1938 dividend disbursements amounted to over double those of 1933, the lowest year of the depression in this respect. Of the total disbursements for the year, mining companies accounted for $90,000,000 or 27·6 p.c. In Table 7 there is given an eight-year record of aggregate monthly dollar payments and yearly totals for all companies paying dividends in Canada.

7.—Dividend Payments of Canadian Companies, by months, 1931-38.

Month.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
	$'000	$'000	$'000	$'000	$'000	$'000	$'000	$'000
January	27,959	20,401	13,855	14,417	14,785	16,032	22,442	23,078
February	5,101	4,095	3,336	3,783	3,496	4,311	5,722	5,018
March	24,373	18,945	16,754	17,267	9,440	19,176	21,500	23,731
April	32,058	21,274	11,602	12,266	14,621	16,161	20,917	22,535
May	5,301	4,674	2,931	4,793	4,025	3,332	6,847	5,711
June	28,831	19,343	17,497	41,939	55,804	61,333	71,562[1]	69,178
July	18,702	16,008	12,672	16,423	18,679	23,408	31,212	27,404
August	4,801	4,392	3,260	4,464	4,362	3,580	4,585	5,926
September	19,187	16,049	14,271	9,732	12,315	14,610	19,226	19,845
October	23,894	15,920	11,807	13,849	14,801	16,018	19,489	19,506
November	4,679	3,652	3,656	4,188	3,601	4,680	9,046	9,887
December	26,073	20,209	23,038	42,639	66,700	78,000	91,176	94,112
Totals	**220,959**	**164,962**	**134,679**	**185,760**	**222,629**	**260,641**	**323,724**[1]	**325,931**

[1] Revised since the publication of the 1938 Year Book.

Section 5.—Foreign Exchange.*

The Canadian dollar, adopted as Canada's currency in 1857, was equivalent to 15/73 of the pound sterling; in other words, the pound was equal to \$4·866 in Canadian currency at par, and remained so, with minor variations between the import and export gold points representing the cost of shipping gold in either direction, until the outbreak of the Great War. During the first eleven years after Confederation, the Canadian dollar was at a premium in the United States, as the United States dollar was not, after the Civil War, redeemable in gold until 1878. From the latter date, the dollar in the two countries was equivalent at par, and variation was only between the import and export gold points or under \$2 per \$1,000.

At the outbreak of the Great War, both the pound sterling and the Canadian dollar were removed from the gold standard and fell to a discount in New York, though this discount was 'pegged' or kept at a moderate percentage by sales of United States securities previously held in the United Kingdom, by borrowing in the United States, and, after the United States entered the War, by arrangement with the United States Government. After the War, when the exchanges were 'unpegged' about November, 1920, the British pound went as low as \$3·18 and the Canadian dollar as low as 82 cents in New York. In the course of the next year or two, exchange returned practically to par, and the United Kingdom resumed gold payments in April, 1925, and Canada on July 1, 1926. From then until 1928 the exchanges were within the gold points, but in 1929 the Canadian dollar again fell to a moderate discount in New York. The dislocation of exchange persisted, with the exception of a few months in the latter half of 1930, into 1931. Dollar rates were below the gold export points, however, only for a few scattered intervals. Fluctuations since September, 1931, are dealt with below.

Recent Movements in Canadian Exchange.—In September, 1931, the equilibrium of the international exchange was seriously disturbed. This unfortunate turn of events followed a period of over six years during which the nations of the world had worked steadily towards the stabilization of their currency systems upon a gold basis. Within two months of the time when the United Kingdom found it necessary to suspend free gold shipments, however, only a very small number of countries, including the United States and France, were left with currencies unshaken by preceding abnormal gold movements. The decision of the United Kingdom to go off the gold standard (Sept. 21, 1931) resulted in a sharp depreciation of sterling in New York. Canadian rates depreciated also, and fluctuated broadly with sterling until the United States dollar dropped from the ranks of gold standard currencies on Apr. 19, 1933.

Since that time major adjustments have occurred in practically all currencies of the world. The United States dollar was replaced on a gold basis, but was devalued at 59·06 p.c. of its former gold parity ($13\frac{5}{7}$ grains or $\frac{1}{35}$ oz. of gold to the dollar as against 23·22 grains previously) on Jan. 31, 1934, with other countries following suit at irregular intervals until the final break-up of the European gold 'bloc' in September, 1936. These countries, including France, Belgium, and Switzerland, were the last to abandon post-War gold standards established between 1925 and 1927. During 1936, the United States dollar and the Canadian dollar fluctuated narrowly about par, while the pound sterling declined in the latter half of the year until it also approached its old New York and Montreal parity of $4·866. With the exception of the last three months of the year, when readjustments within the former gold bloc were occurring, 1936 exchange fluctuations were unusually narrow. This was broadly true also for 1937, although there were considerable declines in the French franc, Spanish peseta, and Brazilian milreis.

---

* Revised by Herbert Marshall, B.A., F.S.S., Chief, Internal Trade Branch, Dominion Bureau of Statistics.

On May 5, 1938, the French franc was devalued to a minimum rate of 179 francs to the pound sterling; the pound itself dropped sharply during the year from an average of $5·00 in January to $4·71 in December. The Canadian dollar remained at fractional discounts in New York from March to December.

8.—Monthly Averages of Exchange Quotations at Montreal, 1937 and 1938.

NOTE.—The noon rates in Canadian funds upon which these averages are based have been supplied by the Bank of Canada.

Month.	Australia. Pound.		Belgium. Belga.		Czecho-slovakia. Krone.		Denmark. Krone.		Finland. Markka.		France. Franc.	
Old par value.	4·8666		·1390		·0296		·2680		·0252		·0392	
	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.
	$	$	$	$	$	$	$	$	$	$	$	$
January	3·927	4·000	·169	·169	·035	·035	·219	·223	·022	·022	·047	·033
February	3·916	4·013	·169	·170	·035	·035	·219	·224	·022	·022	·047	·033
March	3·906	3·998	·168	·169	·035	·035	·218	·223	·022	·022	·046	·031
April	3·928	4·005	·168	·169	·035	·035	·219	·224	·022	·022	·045	·031
May	3·945	4·006	·168	·170	·035	·035	·220	·224	·022	·022	·045	·028
June	3·950	4·009	·169	·171	·035	·035	·220	·224	·022	·022	·044	·028
July	3·979	3·964	·169	·170	·035	·035	·222	·221	·022	·022	·038	·028
August	3·986	3·918	·168	·169	·035	·035	·222	·219	·022	·022	·038	·027
September	3·963	3·867	·168	·170	·035	·035	·221	·216	·022	·021	·035	·027
October	3·963	3·851	·169	·171	·035	·035	·221	·215	·022	·021	·034	·027
November	3·993	3·793	·170	·170	·035	·035	·223	·212	·022	·021	·034	·027
December	3·999	3·771	·170	·170	·035	·035	·223	·210	·022	·021	·034	·027

Month.	Germany. Reichs-mark.		Holland. Guilder.		Italy. Lira.		Norway. Krone.		Spain. Peseta.	
Old par value.	·2382		·4020		·0526		·2680		·1930	
	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.
	$	$	$	$	$	$	$	$	$	$
January	·402	·403	·548	·557	·053	·053	·247	·251	[1]	·061
February	·402	·404	·547	·559	·053	·053	·246	·252	[1]	·061
March	·402	·404	·547	·557	·053	·053	·245	·251	[1]	·058
April	·402	·404	·547	·559	·053	·053	·247	·252	[1]	·058
May	·401	·405	·548	·558	·053	·053	·248	·252	[1]	·059
June	·401	·407	·550	·559	·053	·053	·248	·252	[1]	·058
July	·403	·404	·552	·553	·053	·053	·250	·249	[1]	·057
August	·402	·402	·552	·548	·053	·053	·250	·246	·064	·058
September	·401	·402	·552	·543	·053	·053	·249	·243	·065	·053
October	·402	·404	·553	·549	·053	·053	·249	·242	·063	·051
November	·403	·403	·554	·547	·053	·053	·251	·238	·063	·051
December	·403	·405	·556	·549	·053	·053	·251	·237	·062	·050

[1] No quotations received.

8.—Monthly Averages of Exchange Quotations at Montreal, 1937 and 1938—concluded.

Month.	Sweden. Krona.		Switzerland. Franc.		Argentina. Peso.[1] (paper.)		Brazil. Milreis.[1]		Mexico. Peso.		Hong Kong. Dollar.	
Old par value.	·2680		·1930		·4244		·1196		·4985		·3000	
	1937. $	1938. $	1937. $	1938. $	1937. $	1938. $	1937. $	1938. $	1937. $	1938. $	1937. $	1938. $
January	·253	·258	·229	·231	·302	·292	·061	[2]	·278	·278	·306	·312
February	·252	·259	·228	·232	·300	·266	·061	·058	·278	·277	·304	·313
March	·252	·258	·228	·231	·300	·257	·061	059	·277	256	·304	·311
April	·253	·258	·228	·231	·303	·256	·063	·059	·277	·232	·305	·310
May	·254	·258	·228	·230	·303	·263	·064	·059	·277	·226	·305	·311
June	·255	·258	·229	·231	·304	·263	·066	·059	·278	·211	·304	·312
July	·256	·255	·230	·230	·302	·261	·067	059	·278	·202	·304	·309
August	·257	·252	·230	·230	·302	·259	·066	·059	·278	·198	·310	·306
September	·255	·249	·230	·228	·299	·255	·064	·059	·278	·196	·309	·302
October	·255	·248	·230	·229	·298	·254	·058	·059	·277	·199	·310	·300
November	·257	·245	·231	·228	·295	·237	·057	·059	·277	·202	·311	·296
December	·258	·243	·231	·228	·293	·230	·054	·059	·278	·201	·312	·295

Month.	India. Rupee.		Japan. Yen.		Shanghai. Dollar.		London. Sterling.		New York. Dollar.	
Old par value.	·3650		·4985		·4167		4·8666		1·00	
	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.	1937.	1938.
	$	$	$	$	$	$	$	$	$	$
January	·371	·378	·286	·291	·297	·295	4·909	5·000	1·000	1·000
February	·370	·379	·285	·290	·296	·296	4·895	5·017	1·000	1·000
March	·369	·377	·285	·290	·297	·283	4·882	4·998	1·000	1·003
April	·371	·376	·286	·292	·297	·271	4·910	5·006	·999	1·005
May	·372	·374	·287	·292	·298	·241	4·931	5·008	·998	1·008
June	·373	·371	·288	·292	·297	·191	4·938	5·012	1·001	1·011
July	·376	·370	·289	·289	·296	·183	4·974	4·956	1·001	1·005
August	·376	·365	·290	·285	·297	·167	4·983	4·897	1·000	1·003
September	·374	·361	·289	·282	·297	·173	4·953	4·834	1·000	1·006
October	·374	·359	·289	·281	·295	·162	4·954	4·812	1·000	1·009
November	·377	·354	·291	·276	·294	·160	4·991	4·741	·999	1·007
December	·377	·352	·291	·275	·295	·163	4·999	4·713	1·000	1·009

---

[1] Free market rates. [2] Exchange transactions temporarily suspended.

CHAPTER XXIII.—INSURANCE.*

Insurance business is transacted in Canada by companies of the following classes: (1) companies incorporated under the laws of the Dominion of Canada or of the former "Province of Canada", (2) companies incorporated under the laws of the provinces of Canada, and (3) companies incorporated or formed under the laws of British and foreign countries. The word "companies", as here used, includes fraternal benefit societies and exchanges which transact the business of insurance. The Dominion Insurance Acts provide that companies of classes (1) and (3) above may not transact business anywhere in Canada unless registered† by the Dominion, but these Acts also provide that fire insurance on property in Canada may be effected in companies of class (3) even though not registered, if the insurance is effected without solicitation, advertising, or the use of the mails; and if an office is not maintained in Canada, though property to be insured may be inspected and losses may be adjusted. Insurance so effected is generally known as 'unlicensed insurance'. Companies of class (2) above may transact business in the province of incorporation, subject to compliance with the laws thereof, or in any other province subject to compliance with the laws thereof, or, on compliance with the Dominion laws, may be granted Dominion registration. Most of these companies limit their business to the province of incorporation or to one or more other provinces; a few only have been granted Dominion registration.

What has been said above implies that jurisdiction concerning insurance companies and insurance business is divided between the Dominion and the provinces. There have been many references to the courts and appeals to the Privy Council with a view to determining the respective legislative domains, both in respect of insurance legislation specifically and in respect of legislation affecting companies generally, including insurance companies. The latest Privy Council decision was handed down in 1931. It may now be taken as established that the Parliament of Canada may require companies formed or incorporated outside of Canada to obtain Dominion registration and to continue to be so registered as a condition of transacting business in Canada, and these companies may be required to make returns from time to time of their business and doings in Canada and to furnish evidence of their solvency. The powers of the Dominion go much further in reference to companies incorporated by the Parliament of Canada, but include all of the powers that may be exercised over companies formed or incorporated outside of Canada and registered by the Dominion. The Acts passed in 1932,‡ as since amended, implement the powers of the Dominion as determined by the Privy Council decisions.

The Dominion Acts under which companies are registered are administered by the Department of Insurance under the Minister of Finance. The chief officer of the Department of Insurance is the Superintendent of Insurance. The first Superintendent was appointed in 1875 as head of a newly created Insurance Branch of the Department of Finance. In 1910 the Insurance Branch was constituted into a separate Department, the Department of Insurance, under the Minister of Finance.

Precedent to obtaining first registration, in addition to filing certain documents, including a full and complete financial statement, a company must satisfy the Minister that it is sound and solvent and must make the required initial deposit of securities, varying from $10,000 to $100,000, depending on the class of business to be undertaken. Annual returns are required of all registered companies and the Acts require an examination to be made, by the Superintendent or on his behalf, of the books and records of companies with a view to substantiating the accuracy of the statements filed and the soundness of the companies. Should any company show an unsatisfactory financial condition, the Acts require remedial measures to be taken. British and foreign companies are required to maintain in Canada assets sufficient to cover all of their liabilities in Canada, while Canadian companies are required to maintain in Canada all of their assets, except such as it may be necessary to deposit outside of Canada as security for 'out of Canada' business.

---

* The statistics of Fire, Life, and Miscellaneous Insurance have been revised under the direction of G. D. Finlayson, Superintendent of Insurance, and those pertaining to Government Annuities (Section 4) under the direction of W. M. Dickson, Deputy Minister of Labour.

† Prior to 1932, the Dominion Insurance Acts provided for the "licensing" of companies; the Acts passed in 1932 provided for "registration". The change in terminology does not indicate any change in substance.

‡ The Canadian and British Insurance Companies Act, 1932 (22-23 Geo. V, c. 46). The Foreign Insurance Companies Act, 1932 (22-23 Geo. V, c. 47).

The statistics herein given for companies registered by the Dominion are divided into three classes relating to: (1) insurance against fire; (2) life insurance; and (3) miscellaneous insurance, *viz.*, accident, automobile, aviation, burglary, credit, earthquake, explosion, forgery, guarantee, hail, leakage, live-stock, sickness, steam boiler, title, tornado, and weather insurance. These statistics are compiled from the reports of the Department of Insurance; throughout they apply to calendar years.

Since 1915, the Department of Insurance has collected statistics, included herein, of business transacted by provincial companies licensed by the provinces, classified as to: (1) business transacted within the province of incorporation, and (2) business transacted in other provinces.

Returns for unlicensed insurance, above referred to, were required under Sec. 16 of the Special War Revenue Act for taxation purposes, and statistics compiled from these returns are given in the Canada Year Book, prior to the 1933 edition, as Table 8. This section of the Act having been held unconstitutional by the Privy Council decision, Oct. 22, 1931, on an appeal from the Court of the King's Bench of the province of Quebec, the returns for 1930 were incomplete and are not given in the 1933 Year Book. By an amendment to the Act at the 1932 session of Parliament, a section analogous to Sec. 16 was enacted, applicable to unlicensed insurance and the information was, therefore, revived in the 1934-35 edition. However, this information is no longer required from such companies and has been again dropped.

Statistics of Dominion Government annuities are given at the end of this chapter. The Department of Labour administers the Acts under which these annuities are sold.

Section 1.—Fire Insurance.

Fire insurance in Canada began with the establishment by British fire insurance companies of agencies, usually situated in the seaports and operated by local merchants. The oldest existing agency of a British company is that of the Phœnix Fire Office of London, now the Phœnix Assurance Company, Ltd., which commenced business in Montreal in 1804. On account of the growth of the insurance business of these early British companies, branch offices were established and local managers were appointed, charged with directing the companies' affairs in Canada.

The Halifax Fire Insurance Co. is the first purely Canadian company of which any record is available. Founded in 1809 as the Nova Scotia Fire Association, it was chartered in 1819 and operated in the province of Nova Scotia until 1919 when it was granted a Dominion licence. Among the other pioneer fire insurance companies still in operation, mention may be made of the following: the Quebec

Fire Assurance Co., which commenced business in 1818 and was largely confined in ownership and operations to Quebec province; the British America Assurance Co., incorporated in 1833, the oldest company in Ontario; the Western Assurance Co., organized in 1851, and now, after a rapid and steady growth, one of the largest companies of its kind on the continent; two United States companies, the Ætna Insurance Co., Hartford, Conn., and the Hartford Fire Insurance Co., which commenced business in Canada in 1821 and 1836, respectively.

The report of the Superintendent of Insurance for the year ended Dec. 31, 1937, shows that at that date there were 274 fire insurance companies doing business in Canada under Dominion registration; of these 56 were Canadian, 68 were British, and 150 were foreign companies. In 1875, the first year for which authentic records were collected by the Department of Insurance, 27 companies operated in Canada—11 Canadian, 13 British, and 3 United States. The proportionate increase in the number of British and foreign companies from 59 p.c. to 80 p.c. of the total number is a very marked point of difference between the fire and life insurance businesses in Canada, the latter being carried on very largely by Canadian companies.

Although in its early days the Dominion did not prove a very lucrative field for fire insurance companies, the great advance in building construction and the wide use of improved fire appliances and safety devices have materially reduced the danger of serious conflagrations and have placed the risks assumed by companies in Canada on an equality with those of other countries.

A feature of the fire insurance business, besides the large percentage of British and foreign companies, is the continued increase in the number of companies which are operating on the mutual or reciprocal plan. These companies, in which all profits or losses are directly received or paid by the policyholders, are making themselves felt as competitive factors in the fire insurance business.

Statistics of Fire Insurance.—Statistical tables of fire insurance in Canada, illustrative of the progress of total business since 1869, and of the operations of individual companies for the year 1937, follow. The net amount of fire insurance in force on Dec. 31, 1937, with companies holding Dominion licences, was $9,773,324,476,* while the net amount in force with provincial companies on the same date was $976,220,698. Thus the grand total fire insurance in force on Dec. 31, 1937, with Dominion and provincial companies was $10,749,545,174.

Table **1** shows figures of the growth since 1869 of companies registered by the Dominion, the relationship between losses paid and net premiums written, and the variation in the cost per $100 of insurance. It will be observed that the cost of insurance reached a maximum in 1904 and 1905; there has since been a steady decrease with the exception of the years 1921, 1922, and 1924, when temporary reversals of the downward swing were in evidence. It is noteworthy that the cost of fire insurance has decreased by 56·88 p.c. since 1905. Table **2** shows the business done in Canada by individual companies during the year 1937, while in Tables **3, 4,** and **5** are given figures of the assets, liabilities, incomes and expenditures during the years 1933 to 1937, classified by nationality of companies. A further summary of business is given by provinces in Table **6** for the years 1936 and 1937, showing premiums and losses classified by provinces and by nationality of companies. Further, a summary of the business transacted by both Dominion and provincial licensees is given in Table **7.**

---

* According to preliminary figures, fire insurance in force in companies registered by the Dominion increased by $190,197,753 in 1938. The large increases of later years are due, in part, to Dominion registration of certain provincially registered companies.

1.—Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869-1938.

Year.	Amount in Force at End of Year.	Net Premiums Received during Year.	Losses Paid during Year.	Percentage of Losses to Premiums.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Average Cost per $100 of Insurance.
	$	$	$	p.c.	$	$	$
1869	188,359,809	1,785,539	1,027,720	57·56	171,540,475	[1]	[1]
1870	191,549,586	1,916,779	1,624,837	84·77	199,102,070		
1871	228,453,784	2,321,716	1,549,199	66·73	244,437,172		
1872	251,722,940	2,628,710	1,909,975	72·66	277,387,271		
1873	278,754,835	2,968,416	1,682,184	55·67	271,095,928		
1874	306,844,219	3,522,303	1,926,159	54·68	329,178,974		
1875	364,421,029	3,594,764	2,563,531	71·31	331,098,419		
1876	404,608,180	3,708,006	2,867,295	77·33	401,148,747		
1877	420,342,681	3,764,005	8,490,919	225·58	385,736,566	3,817,360	0·99
1878	409,899,701	3,368,430	1,822,674	54·11	359,847,757	3,723,530	1·35
1879	407,357,985	3,227,488	2,145,198	66·47	360,704,419	3,608,501	1·00
1880	411,563,271	3,479,577	1,666,578	47·90	384,051,861	3,958,437	1·03
1881	462,210,968	3,827,116	3,169,824	82·83	441,416,238	4,414,728	1·00
1882	526,856,478	4,229,706	2,664,986	63·01	478,044,416	4,850,717	1·01
1883	572,264,041	4,624,741	2,920,228	63·14	513,580,302	5,379,950	1·05
1884	605,507,789	4,980,128	3,245,323	65·16	513,983,378	5,934,773	1·15
1885	611,794,479	4,852,460	2,679,287	55·22	486,002,908	5,684,758	1·17
1886	586,773,022	4,932,335	3,301,388	66·93	505,752,907	5,854,172	1·16
1887	634,767,337	5,244,502	3,403,514	64·90	532,757,088	6,145,188	1·15
1888	650,735,059	5,437,263	3,073,822	56·53	541,580,007	6,390,296	1·18
1889	684,538,378	5,588,016	2,876,211	51·47	572,782,104	6,628,336	1·16
1890	720,679,621	5,836,071	3,266,567	55·97	620,723,945	7,019,319	1·13
1891	759,602,191	6,168,716	3,905,697	63·31	623,418,422	7,248,495	1·16
1892	821,410,072	6,512,327	4,377,270	67·22	687,175,688	8,086,503	1·18
1893	814,687,057	6,793,595	5,052,690	74·37	687,604,239	8,115,594	1·18
1894	836,067,202	6,711,369	4,589,363	68·38	653,589,428	8,158,033	1·25
1895	837,872,864	6,943,382	4,993,750	71·92	667,639,048	8,243,605	1·23
1896	845,574,352	7,075,850	4,173,501	58·98	669,288,650	8,397,876	1·25
1897	868,522,217	7,157,661	4,701,833	65·69	663,698,309	8,304,227	1·25
1898	895,394,107	7,350,131	4,784,487	65·09	681,160,689	8,564,124	1·26
1899	936,869,668	7,910,492	5,182,038	65·51	756,257,098	9,316,685	1·23
1900	992,332,360	8,331,948	7,774,293	93·31	803,428,654	10,031,735	1·25
1901	1,038,687,619	9,650,348	6,774,956	70·20	821,522,854	11,688,958	1·42
1902	1,075,263,168	10,577,084	4,152,289	39·26	892,049,886	13,087,251	1·47
1903	1,140,453,716	11,384,762	5,870,716	51·57	933,274,764	14,038,182	1·50
1904	1,215,013,931	13,169,882	14,099,534	107·06	1,002,305,105	16,006,969	1·60
1905	1,318,146,495	14,285,671	6,000,519	42·00	1,140,095,372	18,262,037	1·60
1906	1,443,902,244	14,687,963	6,584,291	44·83	1,210,099,865	18,554,730	1·53
1907	1,614,703,536	16,114,475	8,445,041	52·41	1,364,204,991	20,492,863	1·50
1908	1,700,708,263	17,027,275	10,279,455	60·37	1,466,294,021	21,968,432	1·50
1909	1,863,276,504	17,049,464	8,646,826	50·72	1,579,975,867	22,293,633	1·41
1910	2,034,276,740	18,725,531	10,292,393	54·96	1,817,055,685	24,684,296	1·36
1911	2,279,868,346	20,575,255	10,936,948	53·16	1,987,640,591	26,867,170	1·35
1912	2,684,355,895	23,194,518	12,119,581	52·25	2,374,161,732	30,639,867	1·29
1913	3,151,930,389	25,745,947	14,003,759	54·39	2,925,200,553	36,032,461	1·21
1914	3,456,019,009	27,499,158	15,347,284	55·81	3,104,101,568	36,185,927	1·17
1915	3,531,620,802	26,474,833	14,161,949	53·49	3,111,552,903	36,048,345	1·16
1916	3,720,058,236	27,783,852	15,114,063	54·40	3,418,238,860	37,231,691	1·09
1917	3,986,197,514	31,246,530	16,379,101	52·42	4,049,059,999	43,515,822	1·07
1918	4,523,514,841	35,954,405	19,359,352	53·84	4,606,035,056	48,770,112	1·06
1919	4,923,024,381	40,031,474	16,679,355	41·67	5,423,569,961	57,577,632	1·06
1920	5,969,872,278	50,527,937	21,935,387	43·41	6,790,670,610	71,143,917	1·05
1921	6,020,513,832	47,312,564[2]	27,572,560[3]	58·28	6,139,531,168	68,161,786	1·11
1922	6,348,637,436	48,168,310[2]	32,848,020[3]	68·19	6,471,133,294	68,347,294	1·06
1923	6,806,937,041	51,169,250[2]	32,142,494[3]	62·82	7,311,835,110	73,037,471	1·00

---

[1] Figures from 1869-76 not available. [2] Premiums written. [3] Losses incurred.

1.—Summary Statistics of Fire Insurance by Companies Operating under Dominion Registration, calendar years 1869-1938—concluded.

Year.	Amount in Force at End of Year.	Net Premiums Received during Year.	Losses Paid during Year.	Percentage of Losses to Premiums.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Average Cost per $100 of Insurance.
	$	$	$	p.c.	$	$	$
1924	7,224,475,267	49,833,718[1]	29,186,904[2]	58·57	6,987,536,461	71,146,802	1·02
1925	7,583,297,899	51,040,075[1]	26,943,089[2]	52·79	7,646,026,535	74,679,130	0·98
1926	8,051,444,136	52,595,923[1]	25,705,975[2]	48·87	8.716,166,834	81,104,612	0·93
1927	8,287,732,966	51,375,637[1]	20,831,931[2]	40·55	8,531,139,424	76,423,855	0·90
1928	8,761,579,512	54,826,851[1]	25,544,664[2]	46·57	9,187,224.958	80,413,215	0·88
1929	9,431,169,594	56,112,457[1]	30,209,839[2]	53·84	10,791,096,165	87,317,411	0·81
1930	9,672,996,973	52,646,520[1]	30,427,968[2]	57·71	10,311,193,608	82,700,147	0·80
1931	9,544.641,293	50,342,669[1]	29,938,409[2]	59·47	10,789,737,477	86.741,056	0·80
1932	9,301,747,991	46,911,929[1]	30,068,923[2]	64·10	10,339,649,769	81,823,235	0·79
1933	9,008,262,736	41.573,986[1]	21,655,460[2]	52·09	10,644,787,101	78,980,010	0·74
1934	8,804,840,676	41,468,119[1]	16,968,030[2]	40·92	9,506,703.020	68,793,705	0·72
1935	8,782,698,099	40,884,876[1]	14,821,465[2]	36·25	9,641,773,674	67,596,146	0·70
1936	9,248,273,260	40,218,296[1]	14,072,237[2]	34·99	9,642,269,141	66,831,039	0·69
1937	9,773,324,476	42,498,127[1]	14,821,536[2]	34·88	10,432,290,081	71,913,161	0·69
1938[3]	9,963,522,229	42,445,776[1]	17,356,121[2]	40·89	10,604,195,061	72,137,879	0·68

[1] Premiums written. [2] Losses incurred. [3] Subject to revision.

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1937.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums Per Cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	$	$	p.c.	$	$	p.c.
Canadian Companies.						
Acadia	58,918.036	425,790	0·72	182.482	56,244	30·82
Antigonish	453.350	4,913	1·08	4,906	5,223	106·47
Beaver	8,671,605	71,102	0·82	22,275	7,071	31·74
British America	61,981,614	464,241	0·75	318,740	97,094	30·46
British Canadian	9,766,835	97,736	1·00	66,174	19,331	29·21
British Empire	11,165,486	113,988	1·02	81,331	24,879	30·59
British Northwestern	55,648,001	264,465	0·48	134,219	43,746	32·59
Canada Accident	49,008,720	406,343	0·83	153,759	50,841	33·07
Canada Security	34,216,039	274,418	0·80	145,490	41,306	28·39
Canadian Fire	52,154,303	399,206	0·77	288,190	80,720	28·01
Canadian General	50,916.708	353,588	0·69	159,470	46,966	29·45
Canadian Indemnity	18,746,586	146,316	0·78	108.952	31,815	29·20
Canadian Mercantile	18,963,841	493,873	2·60	268,316	106,279	39·61
Canadian Surety	16,670,641	126,006	0·76	57,869	17,587	30·39
Casualty	10,294,105	74,609	0·72	41,360	9,250	22·36
Clare Mutual	247,680	3,184	1·29	3,086	1,008	32·65
Commerce Mutual	32,000,314	754,195	2·36	422,591	185,910	43·99
Consolidated	18,542,297	162,017	0·87	99,508	31,953	32·11
Cumberland	266,550	3,337	1·25	3,299	3,209	97·26
Dominion Fire	57,786,952	466,638	0·81	295,018	78,674	26·67
Dominion of Canada General	51,876.685	345,951	0·67	195,473	39,163	20·03
Economical Mutual	51,591,465	451,888	0·88	345,855	97,062	28·06
Ensign	12,427,875	102,429	0·82	69,236	18,152	26·22
Federal Fire	43,522,651	376,117	0·86	215,751	87,022	40·33
Fire Insurance of Canada	65,022,012	594,463	0·91	293.560	121,609	41·43
General Accident of Canada	22,344,315	145,878	0·65	75,596	23,683	31·33
Globe Indemnity	60,513,848	341,826	0·56	119,521	42,722	35·74
Gore District	45.635,275	453,850	0·99	353,338	114,587	32·43
Grain Insurance	50,318.996	417,948	0·83	371,868	81,713	21·97
Guardian Insurance	31,969,558	190,389	0·60	94,985	26,681	28·09
Halifax	75,091,151	538,192	0·72	224,185	67,930	30·30
Hudson Bay	87,323,294	398,759	0·46	149,554	53,457	35·74
Imperial Guarantee and Accident	11,654,455	73,953	0·63	43,616	12,485	28·63
Imperial Insurance	24,518,691	174,884	0·71	96,972	45,054	46·46
Kings Mutual	3,580,585	43,483	1·21	42,724	29,783	69·71
Liverpool-Manitoba	79,723,200	500,977	0·63	191,233	68,355	35·74

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1937—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums Per Cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	$	$	p.c.	$	$	p.c.
Canadian Companies— concluded.						
London and Lancashire Guarantee	10,114,524	79,839	0·79	29,231	7,884	26·97
London-Canada	23,703.395	174,985	0·74	102,412	41.743	40·76
Mercantile	43,241,348	214,593	0·50	104,430	27,719	26·54
National-Liverpool	38,506,692	267,097	0·69	95,617	34,177	35·74
North Empire	34,352,630	260.103	0·76	121,654	37,496	30·82
North West	20,715,871	163,139	0·79	64,066	21,184	33·07
Occidental	37,277,346	233,362	0·63	116,062	38,630	33·28
Pacific Coast	36,931.111	207,893	0·56	96,325	27,373	28·42
Pictou County	998,170	7,427	0·74	7,378	6,493	88·00
Pioneer	27,288,882	210,202	0·77	84,124	30,069	35·74
Portage la Prairie	32,214,695	528,130	1·64	270,684	134,967	49·86
Quebec	38,574,442	273,735	0·71	117,739	42,332	35·95
Reliance	21,336,549	128,655	0·60	70,289	24,308	34·58
Scottish Canadian	15,580,240	111,787	0·72	63,355	21,629	34·14
Security National	9,183.233	83,173	0·91	35,622	11,198	31·44
Toronto General	47,766,536	351,225	0·74	159,470	47,116	29·55
Wapiti	6,759,113	113,030	1·67	93,431	43,090	46·12
Wawanesa	162,105,239	1,685,611	1·04	1,139,508	400,377	35·14
Wellington Fire	57,767,904	443,314	0·77	258,084	79,543	30·82
Western	106,630,312	679,909	0·64	452,604	132,406	29·25
Totals, Canadian	**2,054,581,951**	**16,474,161**	**0·80**	**9,222,587**	**3,078,298**	**33·38**
British Companies.						
Alliance	75,649,551	379,400	0·50	334,665	149,310	44·61
Anglo-Scottish	30,664,196	208,406	0·68	123,644	31,582	25·54
Atlas	101,378,311	597,670	0·59	456,208	128,801	28·23
Bankers and Traders'	3,979,255	40.684	1·02	34,721	13,947	40·17
British and European	12,379,820	115.849	0·94	38.440	12,710	33·07
British Crown	61,233.122	348,657	0·57	260,079	54,427	20·93
British General	25,853.981	194,135	0·75	64,066	21.184	33·07
British Law	29,398.538	119,686	0·41	59,542	14,937	25·09
British Oak	16,055,677	141,264	0·88	118,098	37,233	31·53
British Traders'	71,600,222	348.319	0·49	162,425	64,234	39·55
Caledonian	44,424,947	329,688	0·74	266,224	116,703	43·84
Car and General	78,326,230	584,522	0·75	196.741	51,082	25·96
Central	34,090,881	268,188	0·79	95.617	34,177	35·74
Century Insurance	61,773,825	346,422	0·56	175,684	58,228	33·14
China	6,412,665	37,978	0·59	23,204	9,177	39·55
Commercial Union Assurance	224,723,978	1,679,894	0·75	629,837	226,291	35·93
Cornhill	45,462,299	255,754	0·56	212,849	91,842	43·15
Eagle Star	62,421,439	324.996	0·52	265,569	77,746	29·28
Employers' Liability	132,461.619	755,093	0·57	550,246	169,554	30·81
Essex and Suffolk	23,343,498	160,398	0·69	61.586	17,116	27·79
Excess	7,222,015	57,908	0·80	46,913	20,338	43·35
General Accident, Fire and Life	77,125,376	412,147	0·53	304,022	86,234	28·36
Guardian Assurance	117,595,422	921,182	0·78	712,036	213,886	30·04
Guildhall	27,174,750	147,220	0·54	72,335	27,344	37·80
Indemnity Marine	Nil	–	–	Nil	Nil	–
Law Union and Rock	50,555,194	309,864	0·61	259,717	85,072	32·76
Legal and General	41,453,739	243,076	0·59	162,070	63,610	39·25
Liverpool and London and Globe	233,923,070	1,640.515	0·70	843,479	289,662	34·34
Local Government	6,882,167	78,749	1·14	−57,768	−278	–
London and County	13,150,228	110,593	0·84	88,304	25.569	28·96
London and Lancashire	211,662,584	1,211,752	0·57	926,085	282,850	30·54
London and Provincial	7.194,624	63,103	0·88	51,902	11,801	22·74
London and Scottish	14,526,401	99,238	0·68	68.774	28,137	40·91
London Assurance	94,652,037	495.450	0·52	354.425	97,666	27·56
London Guarantee	44,783,957	334.780	0·75	121,654	37,496	30·82
Marine	Nil	–	–	Nil	Nil	–
Merchants Marine	35,324,209	201,875	0·57	164,174	49,335	30·05
Motor Union	37,043.578	266.603	0·72	95,667	19,297	20·17
National Provincial	41,671,439	314,753	0·76	56,427	19,081	33·82

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1937—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums Per Cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses incurred to Premiums Written.
British Companies— concluded.	$	$	p.c.	$	$	p.c.
North British	159,941,276	912,144	0·57	614,801	198,935	32·36
Northern Assurance	73,425,192	487,385	0·66	369,752	151,298	40·92
Norwich Union	147,443,250	942,985	0·64	690,238	246,951	35·78
Ocean Accident	44,855,484	294,578	0·66	212,697	92,517	43·50
Palatine	43,356,964	378,438	0·87	179,385	59,315	33·07
Patriotic	26,554,632	150,880	0·57	107,322	60,072	55·97
Pearl	52,346,612	326,112	0·62	278,985	111,123	39·83
Phœnix of London	302,503,647	1,899,933	0·63	795,333	271,172	34·10
Planet	27,764,111	131,760	0·47	73,684	22,273	30·23
Provincial	41,163,648	374,331	0·91	315,511	110,917	35·15
Prudential	193,601,109	903,515	0·47	560,387	250,689	44·74
Queensland	1,180,033	12,429	1·05	9,971	4,355	43·68
Railway Passengers	12,185,447	72,423	0·59	45,483	10,354	22·76
Royal Exchange	237,466,094	1,652,160	0·70	532,558	144,891	27·21
Royal Insurance	505,536,414	3,418,362	0·68	1,302,372	513,481	39·43
Royal Scottish	19,165,048	108,664	0·57	75,832	34,639	45·68
Scottish Metropolitan	21,552,231	155,587	0·72	107,677	35,407	32·88
Scottish Union	45,191,025	344,193	0·76	303,607	109,438	36·05
Sea	25,581,818	141,535	0·55	118,451	49,382	41·69
Southern	10,163,562	67,273	0·66	37,903	9,792	25·83
State Assurance	36,854,682	291,307	0·79	88,459	19,615	22·17
Sun Insurance	148,074,811	780,425	0·53	571,157	225,979	39·57
Union Assurance	77,533,722	584,381	0·75	256,265	84,734	33·07
Union of Canton	75,814,485	442,522	0·58	278,443	110,065	39·53
Union Marine	40,012,752	271,728	0·68	106,139	32,730	30·84
United British	8,041,684	64,579	0·80	−54,103	−356	-
Westminster	10,799,539	68,511	0·63	Nil	Nil	-
World Marine	14,772,769	72,802	0·49	48,946	12,061	24·64
Yorkshire	42,188,335	339,717	0·81	275,710	89,987	32·64
Totals, British	**4,648,645,220**	**29,836,470**	**0·64**	**16,702,626**	**5,799,198**	**34·71**
Foreign Companies.						
Ætna	87,538,938	423,623	0·48	371,552	111,922	30·12
Affiliated Underwriters	20,055,000	120,262	0·60	108,442	24,592	22·68
Agricultural	16,500,862	90,275	0·55	49,716	16,209	32·60
Alliance Insurance	77,948,960	293,231	0·38	201,223	96,358	47·89
American Alliance	15,080,438	114,459	0·76	48,761	19,415	39·82
American Central	15,994,251	146,088	0·91	64,140	21,184	33·03
American Equitable	50,254,500	350,881	0·70	296,368	106,337	35·88
American Exchange	3,187,250	10,979	0·34	10,522	2,085	19·82
American Home Fire	23,066,757	285,550	1·24	140,661	76,083	54·09
American Insurance	35,093,461	140,572	0·40	82,947	21,641	26·09
American Mutual	11,426,713	63,888	0·56	12,391	5,477	44·20
American Reserve	34,673,444	304,482	0·88	208,643	81,902	39·25
Arkwright Mutual	21,707,889	129,650	0·60	19,972	11,168	55·92
Automobile	146,980	519	0·35	396	93	23·43
Baloise	17,460,633	211,260	1·21	136,206	74,578	54·74
Baltimore American	2,206,444	17,667	0·80	Nil	Nil	-
Bankers and Shippers	13,719,100	107,161	0·78	100,151	38,610	38·55
Bee Fire	36,226,495	200,581	0·55	159,883	61,148	38·25
Blackstone Mutual	17,841,880	103,168	0·58	24,241	6,887	28·41
Boston	14,220,752	72,179	0·51	46,121	15,530	33·67
Boston Manufacturers	25,863,024	153,656	0·59	29,973	12,937	43·16
Caledonian-American	9,228,149	80,293	0·87	50,618	19,956	39·42
California	14,697,579	106,921	0·73	38,440	12,710	33·06
Camden	18,022,381	101,470	0·56	65,102	19,206	29·50
Canners Exchange	10,100,434	77,542	0·77	41,940	960	2·29
Central Manufacturers	10,875,365	103,010	0·95	78,801	20,711	26·28
Central Union	6,642,930	53,130	0·80	11,227	2,395	21·33
Citizens	14,762,417	60,662	0·41	20,577	5,737	27·88
City of New York	9,713,167	76,821	0·79	Nil	Nil	-
Columbia	26,836,046	190,072	0·71	60,827	18,748	30·82
Commerce Insurance	3,285,097	11,831	0·36	7,339	3,084	42·02
Commercial Union of New York	2,507,787	25,322	1·01	12,813	4,237	33·07
Connecticut	29,804,488	229,824	0·77	142,999	51,730	36·18

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1937—continued.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums Per Cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	$	$	p.c.	$	$	p.c.
Foreign Companies—continued.						
Continental	60,652,347	382,747	0·63	290,395	125,019	43·05
Cotton and Woollen Manufacturers' Mutual	5,322,797	33,610	0·63	5,604	3,831	68·36
County Fire	35,014,795	235,823	0·67	9,752	3,883	39·82
Eagle Fire	13,500,036	74,083	0·55	47,849	3,556	7·43
Enterprise Mutual	11,426,713	63,888	0·56	12,391	5,477	44·20
Equitable Fire and Marine	17,351,279	120,892	0·70	28,600	10,346	36·17
Eureka Security	4,697,397	35,688	0·76	28,407	6,987	24·60
Fall River Manufacturers' Mutual	7,327,714	43,516	0·59	−414	3,949	–
Federal	Nil	–	–	Nil	Nil	–
Fidelity-Phenix	51,115,847	369,277	0·72	280,865	133,426	47·51
Fire Association	32,234,796	152,533	0·47	112,996	29,224	25·86
Fireman's Fund	45,106,468	208,502	0·46	155,880	35,514	22·78
Firemen's Insurance	22,359,174	202,059	0·90	154,486	64,481	41·74
Firemen's Mutual	32,345,204	198,247	0·61	65,748	20,338	30·93
Fireproof Sprinklered	5,703,550	9,047	0·16	8,247	610	7·40
First American	8,072,344	56,360	0·70	44,344	13,472	30·38
First National	11,752,390	84,010	0·71	Nil	Nil	–
Foncière	28,645,286	306,214	1·07	230,111	104,477	45·40
Franklin	19,496,068	140,375	0·72	Nil	Nil	–
General Fire of Paris	39,770,768	279,949	0·70	142,683	52,375	36·71
General Insurance of America	40,097,767	252,930	0·63	144,327	78,890	54·66
Girard	3,841,328	34,389	0·90	26,857	14,002	52·13
Glens Falls	26,971,229	142,650	0·53	91,344	35,397	38·75
Granite State	10,399,316	60,088	0·58	38,258	15,147	39·59
Great American	98,417,904	596,798	0·61	437,832	174,505	39·86
Hanover	18,598,531	130,021	0·70	82,359	35,997	43·71
Hardware Dealers	22,340,222	281,965	1·26	229,219	71,970	31·40
Hardware Mutual	24,280,177	296,701	1·22	249,661	78,331	31·38
Hartford Fire	104,018,638	608,567	0·59	513,475	174,745	34·03
Helvetia Swiss Fire	1,055,385	5,316	0·50	5,070	Nil	–
Home Fire and Marine	17,913,858	82,634	0·46	66,145	14,630	22·11
Home Insurance	206,086,602	1,646,070	0·80	1,359,713	475,274	34·95
Homestead	6,687,543	78,237	1·17	Nil	Nil	–
Hope Mutual	7,643,178	44,558	0·58	11,181	4,106	36·72
Imperial Assurance	39,714,932	243,694	0·61	121,654	37,496	30·82
Indiana Lumbermens	9,469,664	84,381	0·89	62,468	19,427	31·10
Individual Underwriters	37,185,472	82,220	0·22	75,866	18,920	24·93
Industrial Mutual	2,661,399	16,805	0·63	2,802	1,915	68·36
Insurance Co. of North America	147,113,837	640,882	0·44	476,027	165,028	34·67
International	5,500,824	59,410	1·08	47,002	32,977	70·16
Lumbermen's Insurance	11,783,074	87,089	0·74	72,876	40,240	55·22
Lumbermens Mutual Insurance	5,851,373	64,555	1·10	53,560	15,372	28·70
Lumbermen's Underwriting Alliance	11,507,225	164,803	1·43	78,612	81,037	103·09
Lumber Mutual	11,324,100	153,185	1·35	82,616	24,138	29·22
Manufacturers Mutual	19,044,521	106,480	0·56	20,652	9,129	44·20
Maryland Insurance	11,130,432	83,629	0·75	63,861	16,760	26·24
Mechanics Mutual	11,426,713	63,888	0·56	12,391	5,477	44·20
Merchants and Manufacturers	32,304,800	283,653	0·88	217,722	137,831	63·31
Merchants Fire	29,923,050	223,206	0·75	190,514	54,110	28·40
Merchants Mutual Fire	10,858,540	63,006	0·58	16,853	3,910	23·20
Mercury	15,745,609	104,765	0·67	81,519	26,247	32·20
Metropolitan Fire	13,574,276	96,214	0·71	75,249	24,575	32·66
Metropolitan Inter-Insurers	19,143,673	55,887	0·29	51,820	14,312	27·62
Michigan Fire	12,648,789	100,722	0·80	27,659	14,836	53·64
Millers National	22,154,899	167,283	0·76	130,875	66,576	50·87
Mill Owners Mutual of Chicago	2,915,044	18,523	0·64	4,499	2,124	47·20
Mill Owners Mutual of Iowa	29,430,734	373,089	1·27	250,583	74,916	29·90
Minnesota Implement	23,744,966	290,143	1·22	236,540	73,348	31·01
National-Ben Franklin	19,718,518	174,230	0·88	140,665	55,549	39·49

2.—Fire Insurance Business Transacted in Canada, by Companies Operating under Dominion Registration, 1937—concluded.

Company.	Gross Amount of Risks Taken during Year.	Premiums Charged Thereon.	Rate of Premiums Per Cent of Risks.	Net Premiums Written.	Net Losses Incurred, including Adjustment Expenses.	Percentage of Losses Incurred to Premiums Written.
	$	$	p.c.	$	$	p.c.
Foreign Companies—concluded.						
National Fire of Hartford	54,164,885	310,692	0·57	249,150	86,803	34·84
Nationale Fire of Paris	50,782,789	503,758	0·99	437,294	184,141	42·11
National Liberty	11,494,380	88,035	0·77	Nil	Nil	–
National Retailers	687,475	5,228	0·76	4,078	"	–
National Security	6,780,046	38,547	0·57	26,597	4,191	15·76
National Union	23,924,187	175,912	0·74	127,025	61,417	48·35
Newark	27,378,149	198,280	0·72	102,691	36,752	35·79
New Brunswick	7,664,410	57,728	0·75	Nil	Nil	–
New Hampshire	28,810,535	190,831	0·66	133,812	57.054	42·64
New Jersey	12,493,300	89,866	0·72	79,719	25,423	31·89
New York Fire	25,968,800	255,432	0·98	212,263	102.312	48·20
New York Reciprocal	28,257,984	58,620	0·21	52,729	3,111	5·90
New York Underwriters	39,201,468	233,321	0·60	96,055	32,749	34·09
Niagara	32,605,176	163,082	0·50	124,582	31,159	25·01
North River	20,566,729	102,607	0·50	75,557	34,153	45·20
North Star	15,274,184	127,874	0·84	91,659	42,912	46·82
Northwestern Mutual	82,978,345	958,572	1·16	679,966	152,660	22·45
Northwestern National	26,591,913	231,832	0·87	143,409	54,005	37·66
Ohio Farmers	5,375,369	48,702	0·91	40,978	9,478	23·13
Pacific Fire	42,053,582	296,926	0·71	132,856	60,949	45·88
Paper Mill Mutual	2,566,387	15,237	0·59	3,434	1,302	37·91
Pennsylvania Lumbermens	6,460,119	77,131	1·19	62,095	23,300	37·52
Phenix of Paris	32,140,340	243,675	0·76	127,905	43,312	33·86
Philadelphia Fire and Marine	14,471,329	90,220	0·62	56,281	7,153	12·71
Philadelphia Manufacturers Mutual	8,611,316	52,766	0·61	9,172	3,284	35·80
Phœnix of Hartford	80,235,878	525,996	0·66	236,970	85,724	36·18
Pilot Reinsurance	874,416	7,586	0·87	6,569	640	9·75
Protection Mutual	4,372,570	27,784	0·64	6,749	3,186	47·20
Providence of Paris	25,179,274	216,459	0·86	164,749	81,307	49·35
Providence Washington	22,423,223	151,840	0·68	91,522	32,651	35·68
Queen of America	117,304,335	849,620	0·72	430,470	153,688	35·70
Retail Lumbermen's	3,880,551	32,480	0·84	30.873	33,252	107·71
Rhode Island	23,016,887	153,494	0·67	101,809	44,772	43·98
Rhode Island Mutual	19,044,521	106,480	0·56	20,652	9,129	44·20
Rossia	17,964,458	135,200	0·75	105,452	35,012	33·20
RubberManufacturers' Mutual	5,322,797	33,610	0·63	5,603	3,831	68·36
St. Paul Fire and Marine	41,930,905	245,471	0·59	160,811	56,966	35·42
Security	23,876,141	121,887	0·51	71,999	20,086	27·90
Sentinel	16,316,328	96,464	0·59	6,915	3,709	53·64
Springfield	66,540,552	430,128	0·65	278,371	150,345	54·01
State Mutual	22,853,426	127,777	0·56	24,782	10,955	43·85
Sussex	15,028,566	144,578	0·96	113,068	48,198	42·63
Svea	8,893,582	56,680	0·64	27,426	8,284	30·20
Switzerland General	24,307,427	213,222	0·88	147,490	68,712	46·59
Tokio	14,226,545	46,486	0·33	36.766	13,879	37·75
Transcontinental	2,406,352	8,347	0·35	6,815	2,001	29·36
Travelers Fire	80,832,794	417,702	0·52	364,556	574,710	157·65
Underwriters Exchange	3,383,250	7,716	0·23	7,716	Nil	–
Union of Paris	46,443,024	381,492	0·82	319,964	124,485	38·91
United Firemen's	14,919,107	94,357	0·63	60,827	18,748	30·82
United Mutual	17,542,504	185,654	1·06	138,809	39,791	28·67
United States Fire	38,367,417	222,655	0·58	171,413	70,890	41·36
Urbaine	16,958,148	96,406	0·57	78,623	30,972	39·39
Warner Reciprocal	2,797,407	5,142	0·18	3,109	Nil	–
Westchester	27,188,364	166,149	0·61	101,258	29,066	28·70
What Cheer Mutual	7,643,178	44,558	0·58	11,180	4,106	36·72
Worcester Manufacturers' Mutual	7,481,065	44,212	0·59	1,435	4,266	297·26
World Fire and Marine	9,391,995	73.464	0·78	57,595	19,437	33·75
Totals, Foreign	**3,729,062,910**	**25,602,485**	**0·69**	**16,572,917**	**6,610,257**	**39·88**
Grand Totals	**10,432,290,081**	**71,913,116**	**0·69**	**42,498,130**	**15,487,753**	**36·44**

3.—Assets of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Assets in Canada of Companies other than Canadian Transacting such Business in Canada, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Canadian Companies.					
Real estate	2,085,756	2,020,588	1,989,144	1,833,914	1,835,280
Loans on real estate	1,220,132	1,116.048	1,801,885	1,938,969	2,500,869
Stocks, bonds and debentures	44,080,324	45,611,133	50,515,906	56,674,057	61,819,268
Agents' balances and premiums outstanding	3,200,097	3,220,983	3,179,405	3,259,316	3,798,305
Cash on hand and in banks[1]	4,782,809	5,451,675	5,857,871	5,587,889	6,111,766
Interest and rents	511,366	504,444	530,024	524,483	607,413
Other assets	4,295,782	3,899,758	3,448,895	3,064,360	3,213,985
Totals, Canadian Companies	**60,176,266**	**61,824,629**	**67,323,130**	**72,882,988**	**79,886,886**
British Companies.					
Real estate	2,935,910	2,995,983	3,020,175	2,290,810	2,256,975
Loans on real estate	2,738,679	2,733,535	2,535,040	1,999,665	1,904,856
Stocks, bonds and debentures	46,925,785	50,857,791	50,353,298	49,196,988	46,219,454
Agents' balances and premiums outstanding	3,890,121	3,967,856	3,807,444	3,872,727	3,921,247
Cash on hand and in banks[1]	3,916,951	4,514,297	4,579,638	4,462,608	4,599,708
Interest and rents	293,393	292,177	284,484	266,540	242,987
Other assets in Canada	1,022,852	978,444	922,161	804,109	1,025,148
Totals, British Companies[2]	**61,723,691**	**66,340,083**	**65,502,240**	**62,893,447**	**60,170,375**
Foreign Companies.					
Real estate	Nil	Nil	Nil	Nil	Nil
Loans on real estate	13,000	13,000	13,000	13,000	12,875
Stocks, bonds and debentures	34,133,891	33,369,124	33,969,892	35,387,700	33,804,847
Agents' balances and premiums outstanding	2,695,116	2,788,018	2,682,621	2,892,533	3,046,224
Cash on hand and in banks[1]	5,409,339	6,111,374	7,137,333	6,740,761	6,911,974
Interest and rents	296,283	262,193	245,152	272,387	227,344
Other assets in Canada	199,810	150,196	170,809	95,450	132,913
Totals, Foreign Companies[2]	**42,747,439**	**42,693,905**	**44,218,807**	**45,401,831**	**44,136,177**
All Companies.					
Real estate	5,021,666	5,016,572	5,009,319	4,124,724	4,092,255
Loans on real estate	3,971,811	3,862,583	4,349,925	3,951,634	4,418,600
Stocks, bonds and debentures	125,140,000	129,838,047	134,839,096	141,258,745	141,843,569
Agents' balances and premiums outstanding	9,785,334	9,976,857	9,669,470	10,024,576	10,765,776
Cash on hand and in banks[1]	14,109,099	16,077,346	17,574,842	16,791,258	17,623,448
Interest and rents	1,101,042	1,058,814	1,059,660	1,063,410	1,077,744
Other assets in Canada	5,518,444	5,028,398	4,541,865	3,963,919	4,372,046
Totals, All Companies	**164,647,396**	**170,858,617**	**177,044,177**	**181,178,266**	**184,193,438**

[1] Or deposited with the Government. [2] Assets in Canada only.

4.—Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Canadian Companies.					
Reserve for unsettled losses	4,871,034	4,976,772	4,970,058	4,644,185	5,393,839
Reserve of unearned premiums	12,765,072	12,598,953	12,589,143	13,033,448	15,275,117
Sundry items	7,197,726	6,540,093	6,640,900	8,055,097	7,880,190
Totals, Canadian Companies[1]	**24,833,832**	**24,115,818**	**24,200,101**	**25,732,730**	**28,549,146**
Excess of assets over liabilities, excluding capital	35,342,433	37,708,811	43,123,029	47,150,259	51,337,740
Capital stock paid up	16,741,004	16,772,229	17,201,092	17,412,854	18,394,690

---

[1] Not including capital.

4.—Liabilities of Canadian Companies Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Liabilities in Canada of Companies other than Canadian Transacting such Business in Canada, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
British Companies.					
Reserve for unsettled losses	4,225,657	3,400,961	3,190,800	3,188,672	3,625,504
Reserve of unearned premiums	16,774,248	16,225,608	15,828,479	15,568,239	16,052,912
Sundry items	1,959,979	1,888,313	1,996,588	1,751,518	1,918,415
Totals, British Companies[1]	**22,959,884**	**21,514,882**	**21,015,867**	**20,508,429**	**21,596,831**
Excess of assets over liabilities, excluding capital	38,763,807	44,825,202	44,486,373	42,385,018	38,573,544
Foreign Companies.					
Reserve for unsettled losses	1,832,977	1,059,395	1,254,840	1,100,262	1,494,564
Reserve of unearned premiums	10,678,271	10,531,393	10,720,926	12,322,459	13,206,175
Sundry items	918,349	986,749	1,162,783	1,247,252	1,227,574
Totals, Foreign Companies[1]	**13,429,597**	**12,577,537**	**13,138,549**	**14,669,973**	**15,928,313**
Excess of assets over liabilities, excluding capital	29,317,842	30,116,368	31,080,258	30,731,858	28,207,864
All Companies.					
Reserve for unsettled losses	10,929,668	9,437,128	9,415,698	8,933,119	10,513,907
Reserve of unearned premiums	40,217,591	39,355,954	39,138,548	40,924,146	44,534,204
Sundry items	10,076,054	9,415,155	9,800,271	11,053,867	11,026,179
Totals, All Companies[2]	**61,223,313**	**58,208,237**	**58,354,517**	**60,911,132**	**66,074,290**
Excess of assets over liabilities, excluding capital	103,424,082	112,650,380	118,689,660	120,267,135	118,119,148
Capital stock paid up[3]	16,741,004	16,772,229	17,201,092	17,412,854	18,394,690

[1] Liabilities in Canada only. [2] Not including capital. [3] Canadian companies only.

5.—Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
INCOME.					
Canadian Companies.					
Net premiums written, fire and other insurance	22,304,621	23,121,983	22,082,758	22,911,717	27,164,951
Interest and dividends earned	2,243,109	2,261,329	2,369,553	2,500,051	2,929,554
Sundry items	1,667,657	3,205,661	4,071,625	4,770,420	1,374,879
Totals, Canadian Companies	**26,215,387**	**28,588,973**	**28,523,936**	**30,182,188**	**31,469,384**
British Companies.					
Net cash for premiums	26,482,370	26,243,241	25,474,312	25,210,739	26,709,676
Interest and dividends on stocks, etc	1,418,894	1,523,618	1,108,045	907,527	926,068
Sundry items	7,644	11,696	1,878	84,338	1,179
Totals, British Companies[1]	**27,908,908**	**27,778,555**	**26,584,235**	**26,202,604**	**27,636,923**
Foreign Companies.					
Net premiums written	17,020,224	17,611,181	18,605,796	19,260,146	20,943,128
Interest and dividends earned, etc	1,434,697	1,244,377	1,165,140	1,114,610	1,076,579
Sundry items	12,067	8,440	145	2,222	993
Totals, Foreign Companies[1]	**18,466,988**	**18,863,998**	**19,771,081**	**20,376,978**	**22,020,700**
EXPENDITURE.					
Canadian Companies.					
Incurred for losses (fire)	5,535,097	5,023,355	4,271,020	4,179,480	4,408,141
General expenses (fire)	7,022,317	7,113,962	6,969,212	6,837,687	8,388,119
On account of branches other than fire or life	11,535,019	12,176,171	11,629,827	11,207,478	14,915,314
Dividends or bonuses to shareholders	958,223	1,049,407	1,257,937	2,044,148	1,694,073
Taxes	1,005,538	1,014,006	1,018,258	1,259,924	1,265,219
Totals, Canadian Companies	**26,056,194**	**26,376,901**	**25,146,254**	**25,528,717**	**30,670,866**
Excess of income over expenditure	159,193	2,212,072	3,377,682	4,653,471	798,518

---

[1] Income in Canada only.

5.—Income and Expenditure of Canadian Companies Operating under Dominion Registration Transacting Fire Insurance, or Fire Insurance and Other Classes of Insurance, and Income and Expenditure in Canada of Companies other than Canadian Transacting such Business in Canada, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
EXPENDITURE—concluded.	$	$	$	$	$
British Companies.					
Incurred for losses (fire)	9,689,271	7,267,241	6,251,193	5,839,751	5,545,301
General expenses (fire)	8,584,709	8,217,314	8,074,949	7,755,018	7,714,303
On account of branches other than fire or life	7,670,487	8,004,002	8,033,050	8,721,614	9,811,510
Taxes	1,129,150	1,196,576	1,297,532	1,267,445	1,320,171
Totals, British Companies[1]	**27,073,617**	**24,685,133**	**23,656,724**	**23,583,828**	**24,391,285**
Excess of income over expenditure	835,291	3,093,422	2,927,511	2,618,776	3,245,638
Foreign Companies.					
Incurred for losses (fire)	8,272,440	6,492,204	5,942,698	5,629,986	6,338,724
General expenses (fire)[2]	7,187,426	7,041,693	7,093,073	7,105,345	7,499,756
On account of branches other than fire or life	1,737,754	1,943,418	2,636,652	2,951,588	4,101,968
Taxes	919,544	851,998	1,003,448	1,107,679	1,091,998
Totals, Foreign Companies[1,2]	**18,117,164**	**16,329,313**	**16,675,871**	**16,794,598**	**19,032,446**
Excess of income over expenditure	349,824	2,534,685	3,095,210	3,582,380	2,988,254

[1] Expenditure in Canada only. [2] Including dividends returned to policyholders.

6.—Net Premiums Written and Net Losses Incurred in Canada by Canadian Companies Operating under Dominion Registration, and by British and Foreign Companies Transacting Fire Insurance Business, by Provinces, 1936 and 1937.

(Registered reinsurance deducted.)

Province.	Canadian.		British.		Foreign.	
	Premiums.	Losses.	Premiums.	Losses.	Premiums.	Losses.
1936.	$	$	$	$	$	$
Prince Edward Island	36,821	8,775	146,101	41,885	63,161	20,128
Nova Scotia	346,153	166,260	838,358	365,348	780,337	376,025
New Brunswick	293,044	65,535	871,145	226,101	610,934	259,389
Quebec	1,526,122	607,678	4,002,432	1,707,141	4,606,249	2,166,433
Ontario	3,390,627	1,154,493	5,788,478	2,232,229	5,116,258	1,700,928
Manitoba	865,355	298,535	1,013,484	223,865	935,549	206,061
Saskatchewan	1,065,382	270,576	879,557	252,956	925,634	203,993
Alberta	830,979	242,347	1,072,829	281,474	1,095,216	263,214
British Columbia	624,921	169,185	1,787,092	507,940	1,564,698	417,151
Yukon	3,456	13,296	23,498	637	16,672	2,297
Totals, 1936[1]	**8,988,537**	**2,984,084**	**16,495,563**	**5,839,749**	**15,744,170**	**5,626,186**
1937.						
Prince Edward Island	40,040	19,051	155,042	55,812	66,909	27,300
Nova Scotia	364,208	182,362	805,058	361,444	734,511	353,752
New Brunswick	256,863	108,435	791,622	246,198	579,969	191,098
Quebec	1,970,794	742,676	4,269,059	1,440,209	5,071,512	1,984,301
Ontario	4,223,897	1,247,604	6,017,854	1,960,230	5,363,242	1,750,081
Manitoba	899,666	276,795	986,830	267,619	970,168	248,738
Saskatchewan	990,771	257,380	824,668	178,773	910,757	239,861
Alberta	823,017	265,769	1,021,887	383,001	1,123,275	544,400
British Columbia	657,960	200,753	1,770,155	651,786	1,736,941	981,548
Yukon	5,638	29	22,320	18	8,589	502
Totals, 1937[1]	**10,234,678**	**3,301,048**	**16,702,623**	**5,545,300**	**16,572,917**	**6,338,720**

[1] Totals include, in many cases, small items unapportioned by provinces.

Summary of Fire Insurance in Canada, 1937.—Of the total amount of fire insurance effected in Canada during each year, a part is sold by companies holding provincial licences and permits. Such companies generally confine their operations to the province of incorporation, but may be allowed to sell insurance in other provinces. The bulk of fire insurance business, however, is transacted by companies registered by the Dominion. Operations in 1937 are summarized in Table 7.

7.—Dominion and Provincial Fire Insurance in Canada, 1937, with Totals for 1936.

Item.	Gross Insurance Written.	Net in Force at End of Year.	Net Premiums Received.	Net Losses Paid.
	$	$	$	$
Dominion Licensees	10,432,290,081	9,773,324,476	42,498,127	14,821,536
Provincial Licensees—				
(*a*) Provincial companies within provinces by which they are incorporated	497,367,800	938,680,743	3,471,166	1,761,946
(*b*) Provincial companies within provinces other than those by which they are incorporated	41,909,759	37,539,955	172,024	72,745
Totals, Provincial Licensees	539,277,559	976,220.698	3,643,190	1,834,691
Grand Totals, 1937	**10,971,567,640**	**10,749,545,174**	**46,141,317**	**16,656,227**
Grand Totals, 1936	**10,373,228,800**	**10,433,125,306**	**45,220,899**	**16,262,861**

Fire Losses.—Closely allied to the subject of fire insurance is the question of fire losses. The Dominion Fire Prevention Association publishes, under the auspices of the Dominion Department of Insurance and with the co-operation of the Association of Canadian Fire Marshals, a report of the loss of life and property caused by fire, from which the information shown in Tables 8 and 9 has been summarized.

In addition to the data shown, the report gives such additional information as: per capita loss by provinces and by type of building, numbers of fires reported, origins of fires, and criminal investigations arising from fires.

In 1938, the per capita loss was greatest in British Columbia, being $3·32 as against the Dominion average of $2·31. The uninsured losses amounted to $4,838,762, or 18·7 p.c. of the total. Of the 44,104 fires reported in 1938, 1,615 were the subject of official inquiry, 143 prosecutions were instituted, and 102 convictions were registered.

8.—Fire Losses in Canada, 1926-38.

NOTE.—For fire losses from 1923-25, see *Statistical Report of Fire Losses in Canada, 1925*, published by the Dominion Department of Insurance. An estimate of losses from 1898-1922 was published in *Statistical Bulletin No. 27 (1922)*, issued by the same Department.

Year.	Property Loss.	Loss per Capita.	Deaths by Fire.	Year.	Property Loss.	Loss per Capita.	Deaths by Fire.
	$	$	No.		$	$	No.
1926	38,295,096	4·15	288	1933	32,676,314	3·15	254
1927	32,254,084	3·29	465	1934	25,437,840	2·44	268
1928	36,402,018	3·79	314	1935	23,221,521	2·12	293
1929	47,499,746	4·85	233	1936	21,549,484	1·95	347
1930	46,109.875	4·70	311	1937	22,746,058	2·04	246
1931	47,117,334	4·54	251	1938	25,899,180	2·31	263
1932	42,193,815	4·06	285				

9.—Fire Losses in Canada, by Provinces, and Percentages of Losses Covered by Insurance, 1929-38.

Province.	1929.		1930.		1931.		1932.		1933.	
	Loss.	P.C. Insured.	Loss.	P.C. Insured.	Loss.	P.C. Insured.	Loss.	P.C. Insured.	Loss.	P.C. Insured.
	$'000		$'000		$'000		$'000		$'000	
P. E. Island	710	60·5	236	62·0	821	44·3	615	62·8	273	52·9
Nova Scotia	1,637	72·4	1,614	66·8	1,735	79·8	1,687	81·3	1,780	74·8
New Brunswick	1,890	71·9	1,943	65·8	4,222	40·5	1,508	67·2	2,188	74·8
Quebec	11,878	64·3	12,177	75·7	12,085	76·0	13,912	80·8	10,862	77·2
Ontario	15,782	83·1	16,146	81·0	15,959	82·9	15,466	88·6	11,250	88·2
Manitoba	2,653	74·5	2,746	82·7	2,517	86·6	1,586	74·6	1,146	90·4
Saskatchewan	4,860	67·6	3,504	76·5	3,565	88·4	1,674	92·6	1,870	69·2
Alberta	3,800	78·6	2,963	82·4	2,983	82·2	2,377	86·0	1,436	93·2
British Columbia	4,190	77·1	4,701	79·2	3,162	82·5	3,299	84·0	1,852	72·8
Totals	**47,400**	**74·1**	**46,030**	**78·5**	**47,049**	**77·0**	**42,124**	**83·7**	**32,657**	**81·0**

9.—Fire Losses in Canada, by Provinces, and Percentages of Losses Covered by Insurance, 1929-38—concluded.

Province.	1934.		1935.		1936.		1937.		1938.	
	Loss.	P.C. Insured.	Loss.	P.C. Insured.	Loss.	P.C. Insured.	Loss.	P.C. Insured.	Loss.	P.C. Insured.
	$'000		$'000		$'000		$'000		$'000	
P. E. Island......	191	56·3	167	77·8	164	62·9	223	62·6	200	56·9
Nova Scotia.....	1,219	69·3	1,156	67·7	1,247	72·9	1,409	70·0	1,442	68·3
New Brunswick..	824	69·4	1,059	64·9	886	68·0	866	63·6	836	74·7
Quebec..........	7,568	83·0	7,405	75·7	6,645	80·8	6,499	76·4	8,552	79·1
Ontario..........	10,040	84·5	8,164	83·8	7,867	86·2	8,135	79·5	9,397	85·5
Manitoba........	1.195	82·1	1,040	79·4	846	87·8	893	89·6	1,053	90·9
Saskatchewan....	1.233	80·5	1,189	70·9	1,081	77·2	1,056	64·4	502[1]	100·0[1]
Alberta..........	1,177	90·1	1,088	89·2	1,099	75·7	1,503	87·4	1,387	79·0
British Columbia	1,989	73·6	1,942	72·1	1,690	66·4	2,144	85·6	2,530	78·4
Totals.......	**25,436**	**81·7**	**23,210**	**78·0**	**21,525**	**80·5**	**22,728**	**78·1**	**25,899**	**81·3**

[1] This amount was given as the total loss, no uninsured losses being reported for Saskatchewan in 1938.

Section 2.—Life Insurance.

An article descriptive of the growth and development of life insurance in Canada, more particularly with reference to insurance legislation, contributed by A. D. Watson, of the Department of Insurance, Ottawa, appears on pp. 937-944 of the Canada Year Book, 1933.

Life Insurance Statistics.—Life insurance business was transacted in Canada in 1937 by 41 companies registered by the Dominion, including 28 Canadian, 5 British, and 8 foreign companies. There were also 7 British and 5 foreign companies registered to write insurance, that had practically ceased to write new insurance, while 2 other British and 3 other foreign companies were authorized under the Act to transact business in connection only with policies written prior to Mar. 31, 1878. One foreign company was licensed to transact business in 1931, but has not yet written any life insurance business in Canada, except by way of reinsurance. The Canadian business of 2 other foreign companies was reinsured during 1937 by companies registered with the Department of Insurance.

As shown by the chronological statistics of Table **10**, life insurance business in Canada has expanded from very small beginnings, the total net life insurance in force in all companies licensed by the Dominion in 1869 being only $35,680,082, while in 1937 it was $6,541,625,046,* the amount per head of the estimated population of Canada having more than doubled since 1919—an evidence of the general recognition of the value of life insurance for the adequate protection of dependants against misfortune. Notable also from these statistics is the fact that in this field British companies, the leaders in 1869, have fallen far behind the Canadian and the foreign companies. The total net amount of new insurance effected during the year 1937 was $671,957,904,† as compared with $618,264,819 in 1936, $588,353,277 in 1935, $595,194,820 in 1934, $578,585,659 in 1933, $653,249,366 in 1932, $782,716,064 in 1931, $884,749,748 in 1930, and $978,141,485 in 1929, while the premiums paid were $199,095,527, as compared with $200,541,265 in 1936, $200,157,567 in 1935, $202,583,536 in 1934, $206,954,224 in 1933, $216,132,957 in 1932, $225,100,571 in 1931, $220,523,727 in 1930, and $210,728,479 in 1929.

In Table **11** detailed statistics are given of the business of Canadian, British, and foreign companies, respectively, by companies, in 1937, while Table **12** is a summary showing the business of Canadian, British, and foreign companies for the past 5 years. Table **13** shows the ordinary and industrial policies in force and effected during the year ended Dec. 31, 1937. Table **14** gives the insurance death rates by classes of companies, and Tables **15**, **16**, and **17** show, respectively, the assets, liabilities, and cash income and expenditure of Canadian and other life insurance companies for the years 1933-37. Statistics of Dominion fraternal insurance are given in Table **18** and of Dominion and provincial insurance combined in Table **19**, which shows that on Dec. 31, 1937, the total life insurance in force in Canada was $6,841,958,943.

---

* This total does not include $174,351,181 of fraternal insurance. Preliminary figures for 1938 indicate $6,630,531,401 of life insurance in force in Dominion companies not including $179,021,972 of fraternal insurance.

† The net amount of new insurance effected in 1938 was $627,373,541 according to preliminary figures.

10.—Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, calendar years 1869-1938.[1]

NOTE.—Figures for other intervening years between 1870 and 1890 are given at p. 958 of the 1938 Year Book.

Year.	Net Amounts in Force.				Insurance in Force per Head of Estimated Population.[2]	Net Amount of New Insurance Effected during Year.
	Canadian Companies.	British Companies.	Foreign Companies.	Total.		
	$	$	$	$	$	$
1869	5,476,358	16,318,475	13,885,249	35,680,082	10·01	12,854,132
1870	6,404,437	17,391,922	18,898,353	42,694,712	11·78	12,194,696
1875	21,957,296	19,455,607	43,596,361	85,009,264	21·50	15,074,258
1880	37,838,518	19,789,863	33,643,745	91,272,126	21·45	13,906,887
1885	74,591,139	25,930,272	49,440,735	149,962,146	33·05	26,767,488
1890	135,218,990	31,613,730	81,591,847	248,424,567	51·98	39,802,956
1891	143,368,817	32,407,937	85,698,475	261,475,229	54·16	37,609,287
1892	154,709,077	33,692,706	90,708,482	279,110,265	57·16	44,062,440
1893	167,475,872	33,543,884	94,602,966	295,622,722	59·95	44,802,847
1894	177,511,846	33,911,885	96,737,705	308,161,436	61·89	49,111,010
1895	188,326,057	34,341,172	96,590,352	319,257,581	63·52	44,101,898
1896	195,303,042	34,837,448	97,660,009	327,800,499	64·60	42,293,322
1897	208,655,459	35,293,134	100,063,684	344,012,277	67·16	47,710,165
1898	226,209,636	36,606,195	105,708,154	368,523,985	71·21	54,387,303
1899	252,201,516	38,025,948	113,943,209	404,170,673	77·21	66,184,063
1900	267,151,086	39,485,344	124,433,416	431,069,846	81·32	67,729,115
1901	284,684,621	40,216,186	138,868,227	463,769,034	86·35	72,854,859
1902	308,202,596	41,556,245	159,053,464	508,812,305	92·61	79,638,914
1903	335,638,940	42,127,260	170,676,800	548,443,000	97·05	90,732,415
1904	364,640,166	42,608,738	180,631,886	587,880,790	100·89	97,617,402
1905	397,946,902	43,809,211	188,578,127	630,334,240	105·02	104,719,585
1906	420,864,847	45,655,951	189,740,102	656,260,900	106·46	93,722,510
1907	450,573,724	46,462,314	188,487,447	685,523,485	106·93	88,784,250
1908	480,266,931	46,161,957	193,087,126	719,516,014	108·61	98,644,410
1909	515,415,437	46,985,192	217,956,351	780,356,980	114·76	130,122,008
1910	565,667,110	47,816,775	242,629,174	856,113,059	122·51	150,785,305
1911	626,770,154	50,919,675	272,530,942	950,220,771	131·85	173,341,738
1912	706,656,117	54,537,725	309,114,827	1,070,308,669	144·85	212,772,151
1913	750,637,902	58,176,795	359,775,330	1,168,590,027	153·12	225,606,787
1914	794,520,423	60,770,658	386,869,397	1,242,160,478	157·65	212,977,464
1915	829,972,809	58,087,018	423,556,850	1,311,616,677	164·34	218,205,427
1916	895,528,435	59,151,931	467,499,266	1,422,179,632	177·75	227,210,162
1917	996,699,282	58,617,506	529,725,775	1,585,042,563	196·66	277,532,095
1918	1,105,503,447	60,296,113	619,261,713	1,785,061,273	219·08	307,279,759
1919	1,362,631,562	66,908,064	758,297,691	2,187,837,317	263·25	517,863,639
1920	1,664,348,605	76,883,090	915,793,798	2,657,025,493	310·55	630,110,900
1921	1,860,026,952	84,940,938	989,875,958	2,934,843,848	333·96	514,654,111
1922	2,013,722,848	93,791,180	1,063,874,968	3,171,388,996	355·58	502,279,333
1923	2,187,434,147	98,023,020	1,148,051,506	3,433,508,673	381·03	548,640,800
1924	2,413,853,480	103,519,236	1,246,623,756	3,763,996,472	411·64	615,372,723
1925	2,672,989,676	108,565,248	1,377,464,924	4,159,019,848	447·44	712,091,889
1926	2,979,946,768	111,375,336	1,518,874,230	4,610,196,334	487·65	797,940,009
1927	3,277,050,348	113,883,716	1,653,474,770	5,044,408,834	523·44	838,475,057
1928	3,671,325,188	115,340,577	1,820,979,858	5,607,645,623	570·16	918,742,064
1929	4,051,612,499	116,545,637	1,989,104,071	6,157,262,207	613·94	978,141,485
1930	4,319,370,209	117,410,860	2,055,502,125	6,492,283,194	636·00	884,749,748
1931	4,409,707,938	119,262,511	2,093,297,344	6,622,267,793	638·17	782,716,064
1932	4,311,747,692	115,831,319	2,044,029,535	6,471,608,546	615·99	653,249,366
1933	4,160,351,570	113,807,916	1,973,466,488	6,247,625,974	584·93	578,585,659
1934	4,139,796,088	116,745,642	1,964,184,199	6,220,725,929	574·13	595,194,820
1935	4,164,893,298	123,148,855	1,971,116,251	6,259,158,404	571·66	588,353,277
1936	4,256,850,150	129,940,311	2,016,247,016	6,403,037,477	580·62	618,264,819
1937	4,304,631,608	137,862,702	2,099,130,736	6,541,625,046[3]	588·28	671,957,904
1938[4]	4,363,764,786	140,839,075	2,125,927,540	6,630,531,401[3]	591·54	627,373,541

---

[1] Figures do not include insurance in force and effected by fraternal societies operating under Dominion charters. The amount of insurance in force in such societies amounted to $179,021,972 in 1938, according to preliminary figures. Corresponding figures for the years 1933-37 are given in Table 18, pp. 991-992.

[2] For estimates of populations upon which these figures are based, see p. 113.

[3] During 1937 approximately $85,000,000, and during 1938 approximately $80,000,000 were transferred from insurance in force in Canada. These amounts represent mainly transfers to business out of Canada of certain reinsurances previously classed as Canadian business. They also include transfers to annuities of contracts providing for combined insurance and annuity benefits or options.

[4] Subject to revision.

11.—Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, 1937.

Company.	Policies Effected.		Policies in Force.		Net Premium Income.	Net Amount of Policies Become Claims.[1]
	No.	Net Amount.	No.	Net Amount.		
		$		$	$	$
Canadian Companies—[2]						
Ancient Foresters'	5,227	1,822,290	16,904	7,054,066	226,325	60,168
Canada	8,584	27,819,312	119,479	383,398,380	10,329,031	4,711,367
Commercial	1,028	1,188,379	5,789	9,997,720	295,866	68,079
Confederation	10,112	22,209,790	106,218	227,804,855	7,254,007	2,662,252
Continental	3,932	5,534,770	23,380	36,771,954	1,136,881	388,392
Crown	7,414	16,175,433	53,680	110,636,877	2,935,405	893,367
Dominion	4,345	10,080,542	52,516	121,039,340	3,627,902	1,015,506
Dominion of Canada	1,008	1,531,710	5,638	8,839,622	246,009	46,856
T. Eaton	1,285	2,687,357	13,561	27,124,589	881,946	306,128
Equitable of Canada	1,038	2,978,323	16,372	36,338,789	949,803	254,147
Excelsior	8,000	16,375,217	47,549	94,571,070	2,794,344	852,837
Great-West	13,229	31,917,949	200,821	456,984,128	13,357,969	4,318,289
Imperial	6,832	16,188,268	81,787	198,508,914	6,506,847	2,024,437
London	124,539	88,553,751	652,077	574,196,130	16,235,860	3,340,551
Manufacturers	9,963	20,959,497	120,942	255,271,906	7,764,525	2,091,778
Maritime	789	1,536,078	4,432	8,869,571	230,410	47,466
Monarch	4,594	8,192,819	31,552	53,726,752	1,572,130	420,122
Montreal	2,749	5,483,276	15,922	32,437,378	960,051	327,458
Mutual of Canada	17,579	38,299,165	213,006	508,822,064	16,196,366	4,801,187
National	2,667	5,664,126	23,532	47,304,377	1,333,937	356,270
North American	8,115	20,054,136	81,592	179,261,220	5,261,789	1,918,067
Northern	1,984	4,880,807	24,908	42,557,160	1,210,520	416,301
Royal Guardians	973	707,282	6,424	3,616,233	111,986	63,055
Saskatchewan	1,230	1,469,294	6,437	8,532,231	218,009	28,500
Sauvegarde	7,270	9,064,735	28,586	36,752,440	1,045,245	224,885
Sovereign	3,290	5,853,739	14,020	24,197,945	661,554	215,502
Sun	17,475	50,110,352	240,182	804,532,661	22,480,583	6,773,761
Western	1,325	1,458,290	3,651	5,483,236	131,218	35,190
Totals, Canadian	**276,576**	**418,796,687**	**2,210,957**	**4,304,631,608**	**125,956,518**	**38,661,918**
British Companies—						
Commercial Union	1	3,000	65	298,777	4,073	2,973
Gresham	[3]	–	595	1,255,876	28,662	50,160
Life Association of Scotland	[3]	–	1	1,624	Nil	Nil
Liverpool and London and Globe	[3]	–	2	8,924	22	"
London and Scottish	649	1,802,130	6,721	16,380,383	465,717	357,858
Mutual and Citizens' (Australia)	18,720	4,884,350	118,695	31,556,282	1,098,473	331,712
North British and Mercantile	[3]	–	150	644,018	16,655	45,994
Norwich Union	[3]	–	1	2,208	62	Nil
Phœnix of London	[3]	–	1,179	4,512,573	108,892	192,420
Prudential of London	2,423	5,532,727	8,827	22,383,586	826,692	126,534
Royal	937	2,559,461	6,790	26,016,712	701,691	271,100
Scottish Amicable	[3]	–	2	6,552	106	Nil
Standard	1,514	3,827,924	11,579	34,757,050	1,030,119	692,791
Star	[3]	–	20	38,137	406	1,927
Totals, British	**24,244**	**18,609,592**	**154,627**	**137,862,702**	**4,281,570**	**2,073,469**
Foreign Companies—						
Ætna	734	4,541,460	11,688	111,993,702	1,857,910	1,000,542
Connecticut Mutual	[3]	–	1	2,000	43	Nil
Equitable of U.S.	[3]	–	5,251	14,605,696	294,196	474,892
Guardian	2	1,500	36	141,593	4,156	Nil
Loyal Protective	41	42,665	54	51,165	1,510	"
Metropolitan	316,971	145,675,649	2,621,927	1,126,572,768	37,410,331	10,218,123
Mutual of New York	[3]	–	18,448	48,852,708	1,666,347	856,658
New York	2,391	4,640,000	63,477	142,365,277	4,704,163	1,629,749
Northwestern Mutual	[3]	–	5	5,100	31	2,049
Occidental	822	4,383,293	3,461	11,800,266	270,336	106,815
Pan-American	[3]	–	12	60,547	1,302	Nil
Phœnix Mutual	[3]	–	4	2,752	43	226
Provident Savings	[3]	–	136	170,124	1,940	10,420
Prudential of America	188,573	70,414,272	1,369,097	521,027,105	19,761,444	4,061,626
State	3	25,742	97	834,171	15,601	18,700
Travelers	1,502	4,755,044	23,595	115,898,201	2,729,046	1,176,680

---

[1] Including matured endowments. [2] Canadian business only. [3] Ceased transacting new business in Canada.

11.—Life Insurance in Force and Effected in Canada by Companies Operating under Dominion Registration, 1937—concluded.

Company.	Policies Effected.		Policies in Force.		Net Premium Income.	Net Amount of Policies Become Claims.[1]
	No.	Net Amount.	No.	Net Amount.		
		$		$	$	$
Foreign Companies—concl.						
Union Labor	[2]	-	[3]	-	486	Nil
Union Mutual	64	66,000	2,011	4,747,561	133,701	82,773
United States	2	6,000	[3]	-	4,853	4,845
Totals, Foreign	**511,105**	**234,551,625**	**4,119,300**	**2,099,130,736**	**68,857,439**	**19,644,098**
SUMMARY.						
Canadian companies	276,576	418,796,687	2,210,957	4,304,631,608	125,956,518	38,661,918
British companies	24,244	18,609,592	154,627	137,862,702	4,281,570	2,073,469
Foreign companies	511,105	234,551,625	4,119,300	2,099,130,736	68,857,439	19,644,098
Grand Totals	**811,925**	**671,957,904**	**6,484,884**	**6,541,625,046**	**199,095,527**	**60,379,485**

[1] Including matured endowments. [2] Ceased transacting new business in Canada. [3] The Canadian business of this company has been reinsured.

12.—Progress of Life Insurance Effected under Dominion Registration, calendar years 1933-37.

Item.		1933.	1934.	1935.	1936.	1937.
Canadian Companies—[1]						
Policies effected	No.	237,655	256,294	241,514	262,200	276,576
Policies in force at end of each year	“	2,059,069	2,077,236	2,100,310	2,156,693	2,210,957
Policies become claims	“	21,851	20,471	20,284	20,818	22,095
Net amounts of policies effected	$	353,725,137	366,634,749	365,542,246	389,909,385	418,796,687
Net amounts of policies in force	$	4,160,351,570	4,139,796,088	4,164,893,298	4,256,850,150	4,304,631,608
Net amounts of policies become claims	$	36,776,004	35,102,636	34,395,990	37,337,200	38,661,918
Amounts of premiums	$	133,693,742	131,407,513	128,714,106	129,258,259	125,956,518
Claims paid[2]	$	38,514,102	36,246,115	36,114,865	38,207,604	39,799,509
Outstanding claims	$	4,209,521	4,688,741	4,884,373	5,569,363	6,159,083
British Companies—						
Policies effected	No.	23,457	31,437	25,690	23,050	24,244
Policies in force at end of each year	“	135,484	143,132	145,111	148,612	154,627
Policies become claims	“	1,814	1,972	1,954	2,244	2,632
Net amounts of policies effected	$	13,930,045	17,131,400	17,961,436	18,623,741	18,609,592
Net amounts of policies in force	$	113,807,916	116,745,642	123,148,855	129,940,311	137,862,702
Net amounts of policies become claims	$	1,931,290	2,158,900	1,560,289	1,894,351	2,073,469
Amounts of premiums	$	3,671,235	3,682,687	4,733,100	3,975,367	4,281,570
Claims paid[2]	$	1,989,965	1,860,638	1,432,254	1,910,261	1,852,762
Outstanding claims	$	257,546	445,952	466,822	453,075	654,708
Foreign Companies—						
Policies effected	No.	497,794	518,617	510,090	513,696	511,105
Policies in force at end of each year	“	4,156,354	4,120,156	4,106,278	4,107,888	4,119,300
Policies become claims	“	39,292	39,464	47,394	49,772	54,068
Net amounts of policies effected	$	210,930,477	211,428,671	204,849,595	209,731,693	234,551,625
Net amounts of policies in force	$	1,973,466,488	1,964,184,199	1,971,116,251	2,016,247,016	2,099,130,736
Net amounts of policies become claims	$	16,769,945	16,621,059	17,842,159	18,855,083	19,644,098
Amounts of premiums	$	69,589,247	67,493,336	66,710,361	67,307,639	68,857,439
Claims paid[2]	$	18,250,412	17,956,517	19,281,966	20,315,814	20,971,421
Outstanding claims	$	1,363,225	1,428,788	1,523,459	1,700,718	2,020,583

---

[1] Canadian business only. [2] Death claims, matured endowments, and disability claims.

12.—Progress of Life Insurance Effected under Dominion Registration, calendar years 1933-37—concluded.

Item.		1933.	1934.	1935.	1936.	1937.
All Companies—						
Policies effected	No.	758,906	806,348	777,294	798,946	811.925
Policies in force at end of each year	"	6,350,907	6,340,524	6,351,699	6,413,193	6,484,884
Policies become claims	"	62,957	61,907	69,632	72,834	78.795
Net amounts of policies effected.	$	578,585,659	595,194,820	588,353,277	618,264,819	671,957.904
Net amounts of policies in force.	$	6,247,625,974	6,220,725,929	6,259,158,404	6,403,037,477	6,541,625,046[1]
Net amounts of policies become claims	$	55,477,239	53,882,595	53,798,438	58,086,634	60,379,485
Amounts of premiums	$	206,954,224	202,583,536	200,157,567	200,541,265	199,095.527[1]
Claims paid[2]	$	58,754,479	56,063,270	56,829,085	60,433,679	62,623,692
Outstanding claims	$	5,830,292	6,563,481	6,874,654	7,723,156	8,834,374

[1] During 1937 approximately $85,000,000 was transferred from insurance in force in Canada. This amount represents mainly transfers to annuities of contracts providing for combined insurance and annuity benefits or options. It also includes transfers to business out of Canada of certain reinsurances previously classed as Canadian business. [2] Death claims, matured endowments, and disability claims.

13.—Ordinary and Industrial Life Insurance Policies in Force and Issued in Canada by Companies Operating under Dominion Registration, 1937.

Type of Policy and Nationality of Company.	Newly Issued.			In Force.		
	Number.	Total Amount.	Average Amount of a Policy.	Number.	Total Amount.	Average Amount of a Policy.
		$	$		$	$
Ordinary Policies—						
Canadian companies	169,596	364,424,605	2,149	1,687,016	3,849,796,491	2,282
British companies	7,257	15,569,642	2,145	46,612	123,485,148	2,649
Foreign companies	65,802	105,716,273	1,607	736,436	1,204,845,475	1,636
Totals, Ordinary Policies	**242,655**	**485,710,520**	**2,002**	**2,470,064**	**5,178,127,114**	**2,096**
Industrial Policies—						
Canadian companies	106,808	44,462,365	416	521,867	196,020,713	376
British companies	16,987	3,392,450	200	108,010	17,417,035	161
Foreign companies	445,272	113,391,134	255	3,382,481	681,862,236	202
Totals, Industrial Policies	**569,067**	**161,245,949**	**283**	**4,012,358**	**895,299,984**	**223**

14.—Insurance Death Rates in Canada, 1934-37.

Type of Insurer.	Number of Policies Exposed to Risk.	Number of Policies Terminated by Death.	Death Rate per 1,000.	Number of Policies Exposed to Risk.	Number of Policies Terminated by Death.	Death Rate per 1,000.
	1934.			1935.		
All companies, ordinary	2,417,547	14,040	5·8	2,408,858	14,473	6·0
All companies, industrial	3,946,182	26,333	6·7	3,961,037	26,701	6·7
Fraternal benefit societies	204,678	3,062	15·0	195,827	3,218	16·4
Totals	**6,568,407**	**43,435**	**6·6**	**6,565,722**	**44,392**	**6·8**
	1936.			1937.		
All companies, ordinary	2,433,360	15,106	6·2	2,459,433	15,688	6·4
All companies, industrial	3,976,250	27,103	6·8	4,009,140	28,198	7·0
Fraternal benefit societies	202,181	3,284	16·2	209,516	3,362	16·0
Totals	**6,611,791**	**45,493**	**6·9**	**6,678,089**	**47,248**	**7·1**

15.—Assets of Canadian Life Companies with Dominion Registration, and Assets in Canada of Life Companies other than Canadian Companies, 1933-37.

NOTE.—Certain British companies transacting fire insurance in Canada transact also life insurance in Canada, and inasmuch as a separation of assets has not been made between these two classes, their assets in Canada are not included here, but are included in the assets of British companies shown in Table 3 on p. 979.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Canadian Companies—[1]					
Real estate	63,073,581	69,379,472	75,503,841	80,495,129	77,041,766
Real estate held under agreements of sale	13,932,171	14,538,336	15,134,489	17,658,063	20,220,895
Loans on real estate	323,148,767	310,791,592	300,707,103	297,992,429	298,146,148
Loans on collaterals	138,574	126,010	809,128	223,113	745,124
Policy loans	294,299,076	284,466,595	272,158,603	261,172,955	259,578,690
Stocks, bonds, and debentures	885,174,606	993,039,478	1,100,025,515	1,250,954,257	1,366,540,901
Interest and rent due and accrued	31,780,768	31,591,496	31,115,498	29,413,033	30,044,101
Cash on hand and in banks	31,424,004	32,249,720	40,240,011	31,289,540	39,860,753
Outstanding and deferred premiums	44,595,013	42,499,654	41,464,884	40,878,240	42,490,962
Other assets	3,475,114	2,625,116	3,585,954	3,127,374	2,327,975
Totals, Canadian Companies[2]	**1,691,041,674**	**1,781,307,469**	**1,880,745,026**	**2,013,204,133**	**2,136,997,315**
British Companies—					
Real estate	765,390	892,058	933,158	1,049,529	1,065,402
Real estate held under agreements of sale	72,328	37,813	31,364	24,610	15,818
Loans on real estate	11,699,041	11,325,817	10,867,000	10,151,601	9,628,225
Loans on collaterals	13,850	13,610	38,510	13,510	13,510
Policy loans	4,661,193	4,568,307	4,307,469	4,041,957	3,962,924
Stocks, bonds, and debentures	42,767,734	52,949,697	51,161,817	53,896,211	52,562,569
Interest and rent due and accrued	620,861	638,897	594,190	575,502	536,607
Cash on hand and in banks	845,193	1,175,226	987,736	832,282	853,305
Outstanding and deferred premiums	505,370	480,525	451,784	476,225	488,057
Other assets	20,673	18,482	26,264	17,215	10,264
Totals, British Companies[3]	**61,971,633**	**72,100,432**	**69,399,292**	**71,078,642**	**69,136,681**
Foreign Companies—					
Real estate	2,581,001	2,588,944	5,269,627	5,696,573	6,618,667
Real estate held under agreements of sale	[4]	[4]	[4]	[4]	[4]
Loans on real estate	29,550,019	28,007,828	26,619,081	24,981,149	22,079,857
Loans on collaterals	[4]	[4]	[4]	[4]	[4]
Policy loans	60,478,765	61,198,865	60,695,186	60,296,544	60,452,038
Stocks, bonds, and debentures	340,788,017	372,056,124	376,622,542	391,066,447	383,669,030
Interest and rent due and accrued	6,224,729	6,292,263	6,196,987	6,203,412	6,125,310
Cash on hand and in banks	6,641,751	8,114,505	8,396,188	9,918,566	9,918,311
Outstanding and deferred premiums	8,538,695	8,676,335	8,510,123	8,320,073	8,236,123
Other assets	6,527	8,747	10,119	11,549	12,020
Totals, Foreign Companies[3]	**454,809,504**	**486,943,611**	**492,319,853**	**506,494,313**	**497,111,356**

[1] A detailed classification of assets showing investments of Canadian companies and giving the percentage of the total in each group and sub-group for 1936 and 1937 will be found at p. xxxvi of the report of the Superintendent of Insurance, Vol. II, for the year ended Dec. 31, 1937. [2] Book values. The market (or authorized) values of these assets were: $1,637,787,245 in 1933, $1,769,443,643 in 1934, $1,868,987,065 in 1935, $2,012,215,355 in 1936, and $2,135,373,567 in 1937. [3] Assets in Canada only. [4] None reported.

16.—Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
Canadian Companies—					
Outstanding claims	12,100,194	11,871,872	13,050,445	14,181,886	15,541,724
Net reinsurance reserve	1,425,125,109	1,505,819,533	1,588,098,044	1,687,181,483	1,793,814,530
Sundry liabilities	193,018,372	206,856,357	219,453,533	246,686,777	259,033,682
Totals, Canadian Companies, Liabilities, not including Capital	**1,630,243,675**	**1,724,547,762**	**1,820,602,022**	**1,948,050,146**	**2,068,389,936**
Surpluses of assets (Table 15, footnote 2) excluding capital	43,543,570	44,895,881	48,385,043	64,165,209	66,983,631
Capital stock paid up	10,849,899	10,851,079	10,714,596	11,091,148	11,141,228

16.—Liabilities of Canadian Life Companies with Dominion Registration, and Liabilities in Canada of Life Companies other than Canadian Companies, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
British Companies—					
Outstanding claims	257,546	445,952	466,822	453,075	654,709
Net reinsurance reserve	33,164,530	32,732,196	34,195,194	35,044,871	37,116,823
Sundry liabilities	527,033	496,863	553,201	715,504	738,851
Totals, British Companies, Liabilities, not including Capital[1].	**33,949,109**	**33,675,011**	**35,215,217**	**36,213,450**	**38,510,383**
Surpluses of assets in Canada	28,028,839	38,431,736	34,190,390	34,872,208	30,633,314
Foreign Companies—					
Outstanding claims	1,363,223	1,428,789	1,523,458	1,700,718	2,020,585
Net reinsurance reserve	368,556,297	379,364,705	391,152,923	404,775,317	419,263,754
Sundry liabilities	19,330,173	19,250,375	19,161,479	21,518,345	21,805,227
Totals, Foreign Companies, Liabilities, not including Capital[1].	**389,249,693**	**400,043,869**	**411,837,860**	**427,994,380**	**443,089,566**
Surpluses of assets in Canada	65,559,811	86,899,742	80,481,993	78,499,933	54,021,790

[1] Liabilities in Canada.

17.—Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
INCOME.	$	$	$	$	$
Canadian Companies—					
Net premium income (including sinking funds)	248,054,820	247,688,370	242,592,120	241,855,580	242,767,374
Consideration for annuities	27,895,586	38,411,121	24,682,052	25,508,449	30,170,769
Interest, dividends, and rents	72,963,331	76,754,763	79,205,749	84,402,395	88,672,914
Sundry items	30,546,735	30,242,669	37,823,442	53,954,295	44,258,474
Totals, Canadian Companies[1]	**379,460,472**	**393,096,923**	**384,303,363**	**405,720,719**	**405,869,531**
British Companies—					
Net premium income (including sinking funds)	3,674,124	3,685,576	4,735,989	3,978,180	4,284,383
Consideration for annuities	130,674	150,100	236,353	416,589	335,966
Interest, dividends, and rents	2,378,363	2,577,378	2,627,766	2,461,065	2,399,259
Sundry items	142,771	123,065	93,109	200,745	206,969
Totals, British Companies[2]	**6,325,932**	**6,536,119**	**7,693,217**	**7,056,579**	**7,226,577**
Foreign Companies—					
Net premium income	69,589,247	67,493,336	66,710,361	67,307,639	68,857,439
Consideration for annuities	969,074	1,197,298	1,272,025	1,609,131	1,630,831
Interest, dividends, and rents	25,074,984	25,190,898	24,569,493	21,456,301	21,140,106
Sundry items	2,404,369	3,191,575	2,706,000	3,238,487	3,353,590
Totals, Foreign Companies[2]	**98,037,674**	**97,073,107**	**95,257,879**	**93,611,558**	**94,981,966**
EXPENDITURE.					
Canadian Companies—					
Payments to policyholders	232,651,353	210,376,762	194,269,254	190,307,438	186,189,872
General expenses	55,818,105	54,521,948	54,788,898	56,678,411	57,434,391
Dividends to stockholders	978,401	1,032,675	1,042,022	1,123,781	1,355,104
Other disbursements	22,083,535	19,315,106	21,170,341	23,463,163	24,727,370
Totals, Canadian Companies[1]	**311,531,394**	**285,246,491**	**271,270,515**	**271,572,793**	**269,706,737**
Excess of income over expenditure	67,929,078	107,850,432	113,032,848	134,147,926	136,162,794

---

[1] Includes income or expenditure on business outside of Canada. [2] Income in Canada.

17.—Cash Income and Expenditure of Canadian Life Companies with Dominion Registration, and Cash Income and Expenditure in Canada of British and Foreign Life Companies, by Principal Items, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$
EXPENDITURE—concluded.					
British Companies—					
Payments to policyholders	4,115,646	3,348,684	3,791,435	3,373,878	3,040,135
General expenses	1,057,672	1,113,153	1,149,283	1,267,760	1,282,760
Other disbursements	178,513	102,629	122,985	86,687	83,438
Totals, British Companies[1]	**5,351,831**	**4,564,466**	**5,063,703**	**4,728,325**	**4,406,333**
Excess of income over expenditure	974,101	1,971,653	2,629,514	2,328,254	2,820,244
Foreign Companies—					
Payments to policyholders	60,260,889	55,176,652	53,897,929	53,586,710	53,802,628
General expenses	13,511,680	13,342,697	13,617,539	13,494,715	13,902,443
Other disbursements	2,018,185	1,888,402	1,790,883	1,914,591	2,469,658
Totals, Foreign Companies[2]	**75,790,754**	**70,407,751**	**69,306,351**	**68,996,016**	**70,174,729**
Excess of income over expenditure	22,246,920	26,665,356	25,951,528	24,615,542	24,807,237

[1] Includes expenditure on business outside of Canada. [2] Expenditure in Canada.

Life Insurance Effected through Fraternal Benefit Societies.—In addition to life insurance, some fraternal benefit societies grant other insurance benefits to members, notably sickness benefits, but these are relatively unimportant. Table 18 gives statistics of life insurance effected with fraternal benefit societies by Canadian members, together with statistics of assets, liabilities, income, and expenditure relating to the whole business of Canadian societies and to the business in Canada of foreign societies. The rates charged by these societies are computed to be sufficient to provide the benefits granted, having regard for actuarial principles. Each benefit fund of every society must be valued annually by a qualified actuary (Fellow, by examination, of the Institute of Actuaries, London; of the Faculty of Actuaries in Scotland; of the Actuarial Society of America; or of the American Institute of Actuaries) and unless the actuary certifies to the solvency of each fund a readjustment of rates or benefits must be made. The statistics in the first part of this table relate to the Canadian societies reporting to the Insurance Department of the Dominion Government. These numbered 9 in 1937, *viz.*, Alliance Nationale, Artisans Canadiens Français, Canadian Woodmen of the World, Catholic Mutual Benefit Association, Commercial Travellers' Association of Canada, the Grand Orange Lodge of British America, Independent Order of Foresters, Sons of Scotland, and Ukrainian Mutual Benefit Association of St. Nicholas.

Under an amendment to the Insurance Act, effective Jan. 1, 1920, all foreign fraternal benefit societies were required to obtain Dominion authority precedent to transacting business in Canada, but any such societies which at that date were transacting business under provincial licences, while forbidden to accept new members, were permitted to continue all necessary transactions in respect of the insurance of their then members. Most of these societies have since obtained Dominion authority to transact business, also some foreign societies that had not previously been licensed by the provinces. Of both classes of society, 27 transacted business in Canada in 1937, *viz.*, Aid Association for Lutherans, Association Canado-Américaine, Brotherhood of R. R. Trainmen Insurance Department, Catholic Order of Foresters, Commercial Travelers' Mutual Accident Association of America (accident business only), Croatian Fraternal Union, Expressmen's Mutual Life Insurance Company (which is continuing the business issued by the Expressmen's Mutual

Benefit Association), First Catholic Slovak Ladies Union, First Catholic Slovak Union, Jewish National Workers' Alliance, Knights of Columbus, Ladies' Catholic Benevolent Association, Lutheran Brotherhood, Lutheran Mutual Aid Society, Maccabees, Ministers Life and Casualty Union, Modern Woodmen of America, National Fraternal Society of the Deaf, National Slovak Society of U.S.A., Royal Arcanum, Slovene National Benefit Society, Sons of Norway, United Commercial Travelers of America (accident business only), Woman's Benefit Association, Women's Catholic Order of Foresters, Workmen's Circle, and Yeomen Mutual Life Insurance Company (which is continuing the business issued by the Brotherhood of American Yeomen).

18.—Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1933-37.

Item.	1933.	1934.	1935.	1936.	1937.
CANADIAN SOCIETIES. (Life Insurance in Canada.)	No.	No.	No.	No.	No.
Certificates effected	9,836	16,167	11,382	9,356	13,857
Certificates become claims	3,202	3,021	2,907	2,946	3,113
	$	$	$	$	$
Amounts paid by members	2,460,916	2,371,386	1,882,790	1,802,479	1,810,873
Amounts of certificates effected	7,895,886	9,760,802	9,335,867	7,343,950	10,858,832
Net amounts in force	118,005,740	116,738,500	106,882,394	103,673,283	108,743,852
Amounts of certificates become claims	2,806,596	2,704,716	2,569,401	2,582,490	2,649,682
Benefits paid	3,576,423	3,458,208	3,381,297	3,505,486	3,183,242
Outstanding claims	191,481	224,026	199,672	232,166	258,419
Amounts Terminated by—					
Death	2,059,143	2,067,427	1,944,665	1,998,792	1,940.583
Surrender, expiry, lapse, etc	13,851,151	13.175,227	14,290,452	11,386,571	10,650,996
Totals, Terminated	15,910,294	15,242,654	16,235,117	13,385,363	12,591,579
Assets (whole business)—					
Real estate	7,033,220	8,585,993	10,397,022	11,193,596	11,155,559
Loans on real estate	21,189,642	18,515,117	15,554,444	14,204,277	13,052,672
Policy loans	10,382,167	10,255,430	9,694,277	9,075,256	8,685,975
Stocks, bonds, and debentures	39,673,098	40,877,813	41,510,089	43,744,256	47,674,717
Cash on hand and in banks	768,465	1,287,571	1,597,591	1,398,799	1,160,077
Interest and rent due and accrued	1,160,153	1,083,875	875,755	872,229	876.312
Dues from members	224,523	358,250	266,475	229,175	275,563
Other assets	1,755,639	1,547,646	1,387,957	1,227,336	1,161,418
Totals, Assets[1]	**82,186,907**	**82,511,695**	**81,283,610**	**81,944,924**	**84,042,293**
Liabilities (whole business)—					
Outstanding claims	287,377	328,645	262,719	310,891	346,968
Reserves	67,413,206	67,004,964	64,959,678	64,861,647	66,189,870
Other liabilities	3,672,270	3,808,321	4,386,740	5,339,604	5,379,673
Totals, Liabilities	**71,372,853**	**71,141,930**	**69,609,137**	**70,512,142**	**71,916,511**
Income (whole business)—					
Assessments	5,183,021	5,075,666	4,003,059	3,913,675	3,769,475
Fees and dues	462,595	474,741	1,227,896	1,290,622	1,437,808
Interest and rents	3,556,741	3,647,972	3,532,387	3,430,954	3,589,554
Other receipts	98,626	139,281	213,156	373,074	126,150
Totals, Income	**9,300,983**	**9,337,660**	**8,976,498**	**9,008,325**	**8,922,987**
Expenditure (whole business)—					
Paid to members	7,460,236	6,503,369	6,619,470	6,589,420	6,302,558
General expenses	1,606,328	1,448,178	1,338,747	1,415,766	1,603,334
Other expenditures	124,454	99,045	198,249	160,567	224,416
Totals, Expenditure	**9,191,018**	**8,050,592**	**8,156,466**	**8,165,753**	**8,130,308**
Excess of income over expenditure	109,965	1,287,068	820,032	842,572	792,679

---

[1] Book values. The market (or authorized) values of these assets were: $80,585,739 in 1933, 80,058,350 in 1934, $79,520,428 in 1935, $80,619,538 in 1936, and $81,728,539 in 1937.

18.—Statistics of Insurance of Fraternal Benefit Societies Reporting to the Dominion Insurance Department, 1933-37—concluded.

Item.	1933.	1934.	1935.	1936.	1937.
FOREIGN SOCIETIES. (Life Insurance in Canada.)	No.	No.	No.	No.	No.
Certificates effected	3,199	3,627	4,060	6,023	6,501
Certificates become claims	725	804	937	1,018	1,057
	$	$	$	$	$
Amounts paid by members	936,918	965,081	979,666	1,438,081	1,446,716
Amounts of certificates effected	3,569,550	3,437,570	3,836,683	5,350,134	5,943,093
Net amounts in force	52,707,770	50,617,201	50,642,333	64,912,851	65,607,329
Amounts of certificates become claims	771,704	802,247	926,068	1,114,864	1,155,782
Benefits paid	901,237	1,012,918	1,015,819	1,164,726	1,290,020
Outstanding claims	95,742	69,647	68,877	144,723	141,575
Amounts Terminated by—					
Death	712,768	660,431	782,952	872,797	919,072
Surrender, expiry, lapse, etc.	5,660,344	5,640,029	4,887,648	5,297,111	5,249,921
Totals, Terminated	6,373,112	6,300,460	5,670,600	6,169,908	6,168,993
Assets (Canadian business)—					
Real estate	Nil	Nil	Nil	Nil	1,200
Loans on real estate	6,275	6,275	6,275	20,250	121,107
Policy loans	426,319	463,612	515,440	617,839	726,576
Stocks, bonds, and debentures	3,137,522	3,721,489	4,341,378	5,589,268	6,444,230
Cash on hand and in banks	291,330	278,463	386,155	359,497	330,755
Interest and rent due and accrued	37,569	51,981	58,400	70,349	84,065
Dues from members	122,136	102,827	108,166	106,625	111,550
Other assets	2	58	179	16	1,614
Totals, Assets	**4,021,153**	**4,624,705**	**5,415,993**	**6,763,844**	**7,821,097**
Liabilities (Canadian business)—					
Outstanding claims	118,079	94,681	94,816	189,947	171,689
Reserves	9,132,448	9,268,650	9,786,781	10,646,026	10,938,525
Other liabilities	49,586	53,173	81,137	221,596	327,264
Totals, Liabilities	**9,300,113**	**9,416,504**	**9,962,734**	**11,057,569**	**11,437,478**
Income (Canadian business)—					
Assessments	1,041,419	1,088,497	1,126,971	1,593,970	1,620,408
Fees and dues	236,640	211,021	179,500	304,217	343,801
Interest and rents	139,769	118,186	154,376	190,179	221,296
Other receipts	9,913	11,081	12,769	40,159	72,618
Totals, Income	**1,427,741**	**1,428,785**	**1,473,616**	**2,128,525**	**2,258,123**
Expenditure (Canadian business)—					
Paid to members	1,003,937	1,113,707	1,140,766	1,304,327	1,443,439
General expenses	159,167	160,640	179,042	218,171	221,125
Other expenditures	7,905	7,092	6,379	13,877	18,831
Totals, Expenditure	**1,171,009**	**1,281,439**	**1,326,187**	**1,536,375**	**1,683,395**
Excess of income over expenditure	256,732	147,346	147,429	592,150	574,728

Summary of Life Insurance in Canada, 1937.—In addition to the business transacted by life insurance companies registered by the Dominion, a considerable volume of business is also transacted by companies licensed by the provinces. Statistics of these provincial companies have been collected since 1915 by the Department of Insurance. Table **19**, showing policies effected and in force, premiums received, and losses paid, in Canada in 1937, summarizes the volume of business done by Canadian, British, and foreign life companies and fraternal societies, whether registered by the Dominion or licensed by the provinces.

19.—Summary of Dominion and Provincial Life Insurance in Canada, by Class of Licensee and by Type of Company, 1937.

Item.	New Policies Effected (net).	Net in Force, Dec. 31.	Net Premiums Received.	Net Claims Paid.
	$	$	$	$
CLASS OF LICENSEE.				
Dominion Licensees—				
(*a*) Life companies	671,957,904	6,541,625,046[1]	199,095,527	62,623,692
(*b*) Fraternals	16,801,925	174,351,181	3,257,589	3,736,329
Totals, Dominion Licensees	**688,759,829**	**6,715,976,227**	**202,353,116**	**66,360,021**
Provincial Licensees—				
(*a*) Provincial companies within province by which they are incorporated—				
(1) Life companies	8,325,593	38,577,088	1,298,790	387,682
(2) Fraternals	3,965,106	35,627,686	1,034,824	937,998
(*b*) Provincial companies in province other than those by which they are incorporated—				
(1) Life companies	3,377,468	17,186,360	392,671	166,209
(2) Fraternals	3,904,700	34,591,582	606,706	603,737
Totals, Provincial Licensees	**19,572,867**	**125,982,716**	**3,332,991**	**2,095,626**
Grand Totals	**708,332,696**	**6,841,958,943**	**205,686,107**	**68,455,647**
TYPE OF COMPANY.				
Canadian Life Companies—				
Dominion	418,796,687	4,304,631,608	125,956,518	39,799,509
Provincial	11,703,061	55,763,448	1,691,461	553,891
Canadian Fraternal Companies—				
Dominion	10,858,832	108,743,852	1,810,873	2,623,452
Provincial	7,869,806	70,219,268	1,641,530	1,541,735
British life companies	18,609,592	137,862,702	4,281,570	1,852,762
Foreign life companies	234,551,625	2,099,130,736	68,857,439	20,971,421
Foreign fraternal companies	5,943,093	65,607,329	1,446,716	1,112,877

---

[1] During 1937 approximately $85,000,000 was transferred from insurance in force in Canada. This amount represents mainly transfers to annuities of contracts providing for combined insurance and annuity benefits or options. It also includes transfers to business out of Canada of certain reinsurance previously classed as Canadian business.

Summary of Life Insurance in Force Out of Canada by Canadian Companies Registered by the Dominion Government.—Tables **20** and **21** give summary statistics of insurance in force as at Dec. 31, 1937, in currencies other than Canadian, classified by companies and by the currencies in which business was written, respectively. The data are given in Canadian dollars, mainly at par rates of exchange for the countries concerned, but there are several exceptions where, for purposes of account, certain companies have converted foreign currencies at rates other than par, particularly where the current rate differs substantially from the par rate. The major part (over 61 p.c.) of the business in force was written in United States currency and over 22 p.c. in sterling. From another standpoint, over 31 p.c. was written in currency of British countries outside Canada and nearly 67 p.c. in currencies of foreign countries.

Canadian life companies operating under Dominion registration had, at Dec. 31, 1937, life insurance in force in countries outside Canada amounting to $3,043,105,341. As shown in Table **21**, insurance in force in currencies other than

Canadian amounted to $2,994,998,562. The difference between these figures is presumably the net amount of non-Canadian business transacted in Canadian currency. As against the total non-Canadian business, including annuity business, the British and foreign investments of Canadian life insurance companies as at Dec. 31, 1937, amounted to $732,112,350.

Since the business in force in Canada of these companies at Dec. 31, 1937, amounted to $4,304,631,608, the total business on their books, Canadian and non-Canadian, amounted to $7,347,736,949. Thus over 41 p.c. of the total business in force was out of Canada. If to this total are added the amounts of life insurance in force in Canadian fraternal benefit societies registered by the Dominion Government ($108,743,852 of Canadian, and $96,764,663 of foreign business), the total business of Canadian companies and societies operating under Dominion registration reached the amount of $7,553,245,464 at the end of 1937. On the assumption that all provincially-licensed companies and societies are Canadian and limit their business to Canada, then, adding the amount of their business in force in Canada ($125,982,716), the grand total of net insurance in force in Canadian companies and societies, in and out of Canada, would amount to about $7,679,228,180 at Dec. 31, 1937.

20.—Life Insurance Effected and in Force, and Reserves by Canadian Companies (Excluding Fraternal Societies) Operating under Dominion Registration, in Currencies other than Canadian, by Companies, 1937, with Totals for 1936.

NOTE.—Figures are given in Canadian dollars, mainly at par rates of exchange.

Company.	Insurance Effected.			Insurance in Force.		
	British Currencies.	Foreign Currencies.	Total.	British Currencies.	Foreign Currencies.	Total.
	$	$	$	$	$	$
Canada	8,841,084	13,724,793	22,565,877	145,785,053	198,150,726	343,935,779
Confederation	7,097,135	7,651,912	14,749,047	73,312,726	61,971,207	135,283,933
Continental	Nil	7,500	7,500	3,750	70,373	74,123
Crown	4,706,177	7,349,711	12,055,888	19,034,137	30,983,923	50,018,060
Dominion	340,847	1,697,794	2,038,641	2,026,088	5,202,073	7,228,161
Dominion of Canada	531,820	Nil	531,820	1,079,663	7,500	1,087,163
T. Eaton	[1]	[1]	-	19,000	29,000	48,000
Equitable of Canada	[1]	[1]	-	Nil	782,557	782,557
Great-West	Nil	12,196,618	12,196,618	“	100,649,348	100,649,348
Imperial	2,717,132	2,319,568	5,036,700	16,956,770	32,445,000	49,401,770
London	Nil	89,167	89,167	Nil	2,275,122	2,275,122
Manufacturers	15,316,746	19,179,008	34,495,754	112,077,852	131,273,951[2]	243,351,803[2]
Maritime	140,930	5,500	146,430	1,910,221	89,032	1,999,253
Monarch	Nil	Nil	-	14,600	Nil	14,600
Montreal	[1]	[1]	-	684,644	370,929	1,055,573
Mutual of Canada	112,231	1,006,170	1,118,401	935,507	13,355,796	14,291,303
National Life	Nil	60,500	60,500	Nil	314,170	314,170
North American	63,540	1,462,859	1,526,399	420,235	10,778,700	11,198,935
Northern	Nil	263,748	263,748	20,000	440,810	460,810
Sun	41,519,973	156,299,582	197,819,555	587,331,927	1,444,196,172	2,031,528,099
Totals, 1937	**81,387,615**	**223,314,430**	**304,702,045**	**961,612,173**	**2,033,386,389**	**2,994,998,562**
Totals, 1936	[3]	[3]	[3]	**926,305,886**	**1,953,350,492**	**2,879,656,378**

[1] None reported. [2] Includes miscellaneous insurance. [3] Statistics not available.

20.—Life Insurance Effected and in Force, and Reserves by Canadian Companies (Excluding Fraternal Societies) Operating under Dominion Registration, in Currencies other than Canadian, by Companies, 1937, with Totals for 1936—concluded.

Company.	Reserves.		
	British.	Foreign.	Total.
	$	$	$
Canada	52,957,812	46,407,941	99,365,753
Confederation	25,475,209	11,763,282	37,238,491
Continental	810	8,597	9,407
Crown	1,885,161	2,567,321	4,452,482
Dominion	329,416	358,614	688,030
Dominion of Canada	46,867	1,596	48,463
T. Eaton	7,148	5,133	12,281
Equitable of Canada	Nil	109,070	109,070
Great-West	"	14,186,367[1]	14,186,367[1]
Imperial	3,924,400	6,897,100	10,821,500
London	Nil	363,428	363,428
Manufacturers	24,947,119	28,151,848[2]	53,098,967[2]
Maritime	444,586	11,319	455,905
Monarch	3,197	Nil	3,197
Montreal	1,762	55,869	57,631
Mutual of Canada	136,449	2,111,370	2,247,819
National Life	Nil	35,503	35,503
North American	115,965	2,345,619	2,461,584
Northern	2,824	27,964	30,788
Sun	187,527,714	233,238,782	420,766,496
Totals, 1937	**297,806,439**	**348,646,723**[1]	**646,453,162**[1]
Totals, 1936	**360,613,078**	**398,455,711**	**759,068,789**[3]

---

[1] Includes reserves for vested and deferred annuities with annual payments amounting to $147,925.
[2] Includes miscellaneous insurance.
[3] Includes reserves for annuities with annual payments aggregating $25,640,162.

21.—Life Insurance in Force by Canadian Companies (Excluding Fraternal Societies) Operating under Dominion Registration, in Currencies other than Canadian, by Currencies, 1937.

NOTE.—Figures are given in Canadian dollars, mainly at par rates of exchange.

Currency.	Insurance Effected.	Insurance in Force.	Reserve.
	$	$	$
British—			
Pounds—			
Sterling	55,065,032	695,486,959	225,220,145
British West Indies	849,719	11,667,616	4,055,803
Palestine	47,206	103,524	4,954
South Africa	9,079,818	78,610,217	15,594,273
Southern Rhodesia	39,550	1,308,331	244,940
Dollars—			
British Guiana	167,000	984,286	95,308
British West Indies	1,993,113	14,533,873	3,387,848
Hong Kong	750,840	7,318,230	1,019,703
Straits Settlements	955,950	8,016,160	1,847,858
Rupees—			
British India	12,439,387	143,582,977	46,335,607
Totals, British	**81,387,615**	**961,612,173**	**297,806,439**

21.—Life Insurance in Force by Canadian Companies (Excluding Fraternal Societies) Operating under Dominion Registration, in Currencies other than Canadian, by Currencies, 1937—concluded.

Currency.	Insurance Effected.	Insurance in Force.	Reserve.
	$	$	$
Foreign—			
Cordobas (Nicaragua)	Nil	254,400	50,926
Dollars (China)	1,270,372	10,663,541	2,655,097
Dollars (Shanghai)	775,402	8,445,999	1,058,710
Dollars (United States)	209,068,418	1,880,765,606	310,123,133
Florins (Netherlands)	267,343	1,340,978	152,088
Francs (France)	10,195	484,321	164,673
Francs (Switzerland)	2,000	9,500	1,014
Guilders (Netherlands)	2,338,617	11,439,572	2,490,159
Lire (Italy)	Nil	91	62
Pesos (Argentina)	4,712,367	31,816,227	5,696,351
Pesos (Chile)	4,065	4,675,304	1,742,190
Pesos (Colombia)	678	535,082	164,925
Pesos (Mexico)	Nil	8,006,918	864,244
Pesos (Phillippines)	1,806,864	14,780,924	4,073,236
Pounds (Egypt)	1,151,371	15,388,147	2,571,595
Sol Oros (Peru)	186	3,487,425	1,218,714
Taels (Shanghai)	Nil	203,350	25,371
Ticals (Siam)	479,399	2,003,639	502,560
Yen (Japan)	1,427,153	39,019,454	15,084,971
Miscellaneous	Nil	65,911	6,704
Totals, Foreign	**223,314,430**	**2,033,386,389**	**348,616,723**[1]
Grand Totals, 1937	**304,702,045**	**2,994,998,562**	**646,453,162**[1]
Grand Totals, 1936	[2]	**2,879,656,378**	**759,068,789**[1]

[1] See footnotes 1 and 3 to Table **20**. [2] Not available.

Grand Total Business of All Life Companies in Canada and of Canadian Companies Abroad.—The first part of Table **22** shows the business of Canadian life and fraternal companies outside Canada and, in the second half of the table, the figures given in Table **19** have been added to this foreign business to give a grand total of the business transacted by all ordinary and fraternal life insurance companies in Canada and of the business of Canadian companies abroad.

22.—Summary of the Business of Canadian Life Companies Abroad and of the Grand Total of All Life Business in Canada and Business of Canadian Companies Abroad, 1937.

Note.—Figures for business in Canada will be found in Table **19**, p. 993.

Item.	New Policies Effected (net).	Net in Force Dec. 31.	Net Premiums Received.	Net Claims Paid.
	$	$	$	$
Canadian Companies Outside Canada.				
Canadian Life Companies—				
Dominion	311,029,424	3,043,105,341	116,460,155	41,634,907
Provincial	[1]	[1]	[1]	[1]
Canadian Fraternal Companies—				
Dominion	6,965,156	96,764,663	1,576,321	2,465,004
Provincial	[1]	[1]	[1]	[1]
British life companies	Nil	Nil	Nil	Nil
Foreign life companies	"	"	"	"
Foreign fraternal companies	"	"	"	"
Totals	**317,994,580**	**3,139,870,004**	**118,036,476**	**44,099,911**

---

[1] None reported.

22.—Summary of the Business of Canadian Life Companies Abroad and of the Grand Total of All Life Business in Canada and Business of Canadian Companies Abroad, 1937—concluded.

Item.	New Policies Effected (net).	Net in Force Dec. 31.	Net Premiums Received.	Net Claims Paid.
All Life Insurance in Canada and Canadian Business Abroad.	$	$	$	$
Canadian Life Companies—				
Dominion	729,826,111	7,347,736,949	242,416,673	81,434,416
Provincial	11,703,061	55,763,448	1,691,461	553,891
Canadian Fraternal Companies—				
Dominion	17,823,988	205,508,515	3,387,194	5,088,456
Provincial	7,869,806	70,219,268	1;641,530	1,541,735
British life companies	18,609,592	137,862,702	4,281,570	1,852,762
Foreign life companies	234,551,625	2,099,130,736	68,857,439	20,971,421
Foreign fraternal companies	5,943,093	65,607,329	1,446,716	1,112,877
Grand Totals	**1,026,327,276**	**9,981,828,947**	**323,722,583**	**112,555,558**

Section 3.—Miscellaneous Insurance.

Since 1875 the growth of insurance business other than fire and life has been steady. The report of the Superintendent of Insurance for the calendar year 1880 shows that the number of companies licensed for the transaction of accident, guarantee, plate glass, and steam boiler insurance—the only four classes of miscellaneous insurance then transacted—was 5, 3, 1, and 1, respectively. The report for the year 1937 shows that miscellaneous insurance in Canada now includes various forms of accident and 21 other classes of insurance transacted by Dominion companies. In 1880, 10 companies transacted business of the miscellaneous kind, but in 1937 such insurance was issued by 246 companies, of which 53 were Canadian, 65 British, and 128 foreign; 189 of these 246 companies also transacted fire insurance. In addition, 17 fraternal orders or societies carried on accident and sickness insurance as well as life insurance business and 2 fraternal orders or societies carried on accident insurance only.

Accident Insurance.—The first licence of this kind was issued to the Travelers' Co., of Hartford, Conn., in 1868. The first licence to a Canadian company was issued to the Accident Insurance Co. of Canada, which was organized in 1872 and commenced business in 1874. In 1927 life companies were empowered to include in life insurance policies additional insurance, payable only in event of death from accident, up to an amount not exceeding the amount payable in event of death from other causes, commonly known as 'the double indemnity benefit'. A large proportion of life insurance policies issued in recent years includes this benefit. Seventy-eight companies transacted accident insurance in 1937.

Automobile Insurance.—This is now one of the most important branches of the miscellaneous class of insurance. Premiums increased from $80,446 in 1910 to $573,604 in 1915 and to $18,260,176 in 1930; for 1937 they were $16,810,675, showing an increase of 24·4 p.c. as compared with 1936 and a 7·9 p.c. decrease compared with 1930. There has been an increase in the number of companies from 7 to 155 during the 27-year period.

Plate Glass Insurance.—Policies were first sold in Canada by the Metropolitan Plate Glass Insurance Co., a United States concern, which withdrew from Canada during 1882. The 77 companies operating in Canada in 1937 received premiums of $549,105 and incurred losses of $238,544, compared with premiums of $465,436 and losses of $237,257 for 1936.

Burglary Insurance.—In 1893 only one company issued burglary policies. A second followed in 1905 and in 1910 five companies were operating, while 78 companies sold this type of insurance during 1937. The premium income of these companies amounted in 1937 to $1,522,799, and the losses incurred amounted to $586,549.

Hail Insurance.—Insurance against hailstorms is a class of business of comparatively recent development in Canada. During the year 1937, 32 companies undertook this class of risk, the premiums written amounting to $567,833, and the losses incurred to $408,949. The total premiums for the 28 years during which this business has been carried on in Canada amounted to $69,384,139 and the total losses paid to $47,488,528.

23.—Insurance by Companies Registered by the Dominion Government to Transact Business other than Fire and Life in Canada, by Class of Insurance, 1937.

Class of Insurance.	Premiums Received.	Losses Incurred.	Unsettled Claims.	
			Not Resisted.	Resisted.
	$	$	$	$
ACCIDENT.				
(1) Personal	3,199,319	1,356,466	632.684	76,161
(2) Employers' liability and workmen's compensation	623,713	215,606	801,634	6,614
(3) Other	1,894,090	575,915	622,343	8,738
Combined accident and sickness	2,319,214	1,293,069	339,341	1,780
Falling aircraft	25	1	Nil	Nil
OTHER.				
Automobile	16,810,675	9,659,005	4,693,419	216,237
Aviation	82,828	72,607	4,530	Nil
Burglary	1,522,799	586,549	140,819	1,135
Credit	197,112	13,510	150,213	Nil
Earthquake	9,006	9	Nil	“
Explosion	48,053	418	“	“
Forgery	40,383	8,117	7,794	“
Fraud	10,641	2,786	825	“
Guarantee (fidelity)	1,240,064	291,098	208,630	2,550
Guarantee (surety)	928,040	299,597	362,130	100,395
Hail	567,833	408,949	1,513	Nil
Inland transportation	918,778	356,671	119,624	850
Live-stock	28,511	11,455	1,502	4,513
Machinery	286,401	66,378	25.422	Nil
Personal property	1,058,017	390,648	100,461	“
Plate glass	549,105	238,544	24,567	“
Property	53,719	7,386	2,597	“
Sickness	1,501,763	913,810	323,489	2,755
Steam boiler	552,557	22,362	19,050	Nil
Tornado	132,147	86,609	4,488	“
Weather	6,284	3,771	250	“

24.—Income and Expenditure, and Assets and Liabilities of Canadian Companies Operating under Dominion Registration doing Insurance Business other than Fire and Life, 1937.

Company.	Income.	Expenditure.	Excess of Income over Expenditure.	Assets.	Liabilities.[1]	Excess of Assets over Liabilities.
	$	$	$	$	$	$
Boiler Inspection	482,872	415,796	67,076	1,091,781	524,380	567,401
Chartered Trust	571,202	475,557	95,645	4,998,743[2]	3,744,264	1,254,479
Confederation Life	102,078	82,770	19,308	138,355	29,968	108,387
T. Eaton General	18,383	31,016	−12,633	160,471	20,534	139,937
Fidelity Insurance	236,352	222,023	14,329	517,975	208,569	309,406
Guarantee Co. of North America	1,043,184	1,021,275	21,909	4,489,274	1,046,344	3,442,930
London Life	320,584	297,791	22,793	356,491	201,496	154,995
North American Accident	140,408	99,016	41,392	617,888	35,537	582,351
Protective Association	341,092	350,006	−8,914	314,777	148,142	166,635
Royal Guardians	1,843	2,931	−1,088	19,954	12,362	7,592
Totals	**3,257,998**	**2,998,181**	**259,817**	**12,705,709**	**5,971,596**	**6,734,113**

[1] Not including capital stock.

[2] Including $615,135 loans on collateral, and $2,009 deposits with trust companies for investment.

25.—Income and Expenditure in Canada of Companies, other than Canadian, doing Insurance Business other than Fire and Life, 1937.

Company.	Income.			Expenditure.			Excess of Income over Expenditure.
	Premiums.	Interest and Dividends. Earned.	Total Income.	Net Losses Incurred.	General Expenditure.	Total Expenditure.	
	$	$	$	$	$	$	$
Ætna Casualty	32,002	4,750	48,307	23,140	19,718	42,858	5,449
Ætna Life	78,287	4,905	83,191	56,090	12,062	68,152	15,039
American and Foreign	Nil	1,063	1,063	Nil	Nil	Nil	1,063
American Automobile Fire	196,778	Nil	196,778	71,827	81,957	153,784	42,994
American Automobile	580,281	176	580,458	379,843	232,255	612,099	−31,641
American Credit	197,112	13,582	210,694	13,510	91,263	104,773	105,921
American Surety	43,067	4,700	47,767	−1,457	19,296	17,839	29,928
Arex Indemnity	3,941	1,365	5,308	24	580	604	4,704
Bee Hail	8,583	Nil	8,583	5,111	4,635	9,746	−1,163
British and Foreign	2,186	5,248	7,433	−2,721	2,009	−712	8,145
Continental Casualty	646,197	22,262	668,460	274,499	340,034	614,533	53,927
Empire Insurance	Nil	2,000	2,000	Nil	2,923	2,923	−923
Employers Reinsurance	245,456	8,317	253,773	114,408	106,457	220,865	32,908
Fidelity and Casualty	12,666	Nil	12,666	2,031	9,757	11,788	878
Foncière Transport and Accident	87,883	9,456	97,339	235,512	89,972	325,484	−228,145
General Casualty of America	71,531	6,831	78,362	38,454	36,971	75,988	2,374
General Casualty of Paris	255,040	20,941	275,981	125,613	145,194	270,807	5,174
General Exchange	852,106	13,675	865,936	454,697	167,913	622,610	243,326
General Reinsurance	16,154	Nil	16,154	Nil	4,130	4,130	12,024
Great American Indemnity	66,427	9,250	75,677	36,218	43,965	80,182	−4,505
Hartford Accident	210,569	13,665	224,234	98,104	89,176	187,279	36,955
Hartford Live Stock	19,010	3,100	22,110	9,303	8,102	17,406	4,704
Hartford Steam Boiler	20,948	3,600	24,548	9,253	7,223	16,477	8,071
Indemnity Insurance	145,873	12,625	158,498	50,143	78,190	128,333	30,165
International Fidelity	4,270	Nil	4,270	691	1,010	1,702	2,568
Liberty Mutual	2,670	1,172	3,842	4,402	1,134	5,537	−1,695
Loyal Protective Life	196,991	5,462	202,454	90,569	61,485	152,053	50,401
Lumbermens Mutual Casualty	267,877	14,424	282,301	135,312	82,909	260,848	21,453
Maryland Casualty	250,519	Nil	250,519	138,415	134,659	273,075	−22,556
Metropolitan Casualty	211,943	18,379	230,322	142,245	115,512	257,756	−27,434
Metropolitan Life	715,533	16,600	732,221	376,307	175,661	695,483	36,738
Mutual Benefit Health and Accident	419,050	6,951	426,001	185,710	241,304	427,015	− 1,014
National Surety	−7,289	5,703	−1,586	40,428	4,985	45,413	−46,999
Northwest Casualty	50,669	2,667	53,336	37,069	20,432	60,666	− 7,330
Occidental Life	17,421	3,099	20,521	22,393	4,869	27,262	− 6,741
Ocean Marine	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Prudential Insurance	9,199	"	9,199	3,320	1,215	5,948	3,251
St. Paul Mercury	41,181	2,729	43,910	59,973	18,045	78,018	−34,108
Standard Accident	892	2,210	3,102	3,150	323	3,473	−371
Standard Marine	Nil	500	500	Nil	Nil	Nil	500
Tornado Inter-Insurance	520	495	1,015	"	248	247	768
Travelers Indemnity	471,167	37,750	508,916	209,725	271,916	481,641	27,275
Travelers Insurance	758,581	61,292	819,874	301,058	328,217	629,276	190,598
United Pacific Insurance	19,495	813	20,307	4,952	4,788	9,740	10,567
United States Fidelity and Guaranty	741,818	27,075	768,893	190,928	350,434	541,361	227,532
United States Guarantee	55,146	Nil	55,146	26,487	23,649	50,136	5,010
Zurich	497,682	30,152	527,834	243,490	217,735	461,225	66,609
Totals	**8,517,432**	**398,982**	**8,928,216**[1]	**4,210,227**	**3,654,312**	**8,055,823**[2]	**872,393**

---

[1] Including $11,803, sundry income.

[2] Including $191,284, dividends returned to policyholders

26.—Dominion and Provincial Insurance in Canada, other than Fire and Life, 1937

Class of Business.	Dominion Licensees.	Provincial Licensees—			Grand Total.
		Within Provinces by which they are Incorp.	In Provinces other than those by which they are Incorp.	Total Provincial Licensees.	
	$	$	$	$	$
	NET PREMIUMS WRITTEN.				
Accident—					
Personal	3,199,319	26,524	−22	26,502	3,225,821
Employers' liability and workmen's compensation	623,713	84,204	1,074	85,278	708,991
Other	1,894,090	67,512	363	67,875	1,961,965
Combined accident and sickness	2,319,214	38,481	68,793	107,274	2,426,488
Falling aircraft	25	Nil	Nil	Nil	25
Automobile	16,810,675	881,642	51,200	932,842	17,743,517
Aviation	82,828	Nil	Nil	Nil	82,828
Burglary	1,522,799	20,635	176	20,811	1,543,610
Credit	197,112	Nil	Nil	Nil	197,112
Earthquake	9,006	"	"	"	9,006
Explosion	48,053	"	"	"	48,053
Forgery	40,383	"	"	"	40,383
Fraud	10,641	"	"	"	10,641
Guarantee (fidelity)	1,240,064	21,740	"	21,740	1,261,804
Guarantee (surety)	928,040	32,659	"	32,659	960,699
Hail	567,833	13,389	"	13,389	581,222
Inland transportation	918,778	3,286	−86	3,200	921,978
Live stock	28,511	Nil	Nil	Nil	28,511
Machinery	286,401	"	"	"	286,401
Personal property	1,058,017	"	"	"	1,058,017
Plate glass	549,105	53,773	221	53,994	603,099
Property	53,719	Nil	Nil	Nil	53,719
Sickness	1,501,763	1,671	"	1,671	1,503,434
Sprinkler[1]	4,650	Nil	"	Nil	4,650
Steam boiler	552,557	"	"	"	552,557
Title	Nil	"	"	"	Nil
Tornado	132,147	"	"	"	132,147
Weather	6,284	50,123	"	50,123	56,407
Totals	**34,585,727**	**1,295,639**	**121,719**	**1,417,358**[2]	**36,003,085**[2]
	NET LOSSES INCURRED.				
Accident—					
Personal	1,356,466	17,976	3,336	21,312	1,377,778
Employers' liability and workmen's compensation	215,606	67,743	80	67,823	283,429
Other	575,915	37,851	2,597	40,448	616,363
Combined accident and sickness	1,293,069	11,213	33,890	45,103	1,338,172
Falling aircraft	1	Nil	Nil	Nil	1
Automobile	9,659,005	468,492	109,508	578,000	10,237,005
Aviation	72,607	Nil	Nil	Nil	72,607
Burglary	586,549	11,191	702	11,893	598,442
Credit	13,510	Nil	Nil	Nil	13,510
Earthquake	9	"	"	"	9
Explosion	418	"	"	"	418
Forgery	8,117	"	"	"	8,117
Fraud	2,786	"	"	"	2,786
Guarantee (fidelity)	291,098	2,642	270	2,912	294,010
Guarantee (surety)	299,597	6,764	Nil	6,764	306,361
Hail	408,949	11,609	"	11,609	420,558
Inland transportation	356,671	854	2,076	2,930	359,601
Live stock	11,455	Nil	Nil	Nil	11,455
Machinery	66,378	"	"	"	66,378
Personal property	390,648	"	"	"	390,648
Plate glass	238,544	29,368	799	30,167	268,711
Property	7,386	Nil	Nil	Nil	7,386
Sickness	913,810	506	"	506	914,316
Sprinkler[1]	396	Nil	"	Nil	396
Steam boiler	22,362	"	"	"	22,362
Title	Nil	"	"	"	Nil
Tornado	86,609	"	"	"	86,609
Weather	3,771	44,037	"	44,037	47.808
Totals	**16,881,732**	**710,246**	**153,258**	**863,504**[3]	**17,745,236**[3]

---

[1] This business was transacted by a company not holding certificates of registry to transact fire insurance.
[2] Excluding $2,250,562, premiums of fraternal benefit societies for accident, sickness, and funeral business.
[3] Excluding $873,611, losses of fraternal benefit societies for accident, sickness, and funeral business.

Section 4.—Government Annuities.

For more than thirty years the Dominion Government has carried on a service which permits and encourages Canadians, during the earning period of their lives, to make provision for their old age. The necessary legislation was passed in 1908 as the Government Annuities Act (c. 7, R.S.C., 1927, amended by c. 33, 1931), which is administered by the Minister of Labour, and provides that any person resident or domiciled in Canada may purchase an annuity from the Government of Canada.

A Canadian Government annuity is a fixed yearly income paid by the Government of Canada. The income is payable in quarterly instalments (unless otherwise expressly provided) for life, but may be guaranteed for ten, fifteen, or twenty years in any event. The minimum amount of annuity obtainable on the life of one person or on the lives of two persons jointly is $10 a year and the maximum amount of annuity payable to any annuitant or to joint annuitants is $1,200 a year.

Although in the vast majority of cases annuities issued on the lives of individuals are purchased by the individuals themselves, provision is made in the Act whereby employers may contract for the purchase of annuities on behalf of their employees, or associations on behalf of their members.

Annuity contracts are of two classes, deferred and immediate, under each of which there are various plans available. Deferred annuity contracts are for purchase by younger persons desiring to provide for their old age; purchase may be made by monthly, quarterly, or yearly premiums, or by a lump sum. Immediate annuity contracts are for purchase by older persons wishing to obtain immediate incomes through their accumulated savings.

The property and interest of any annuitant in any contract for a Government annuity is neither transferable nor attachable. As a rule, the purchaser contracts that in the event of the death of the annuitant before the date fixed for the annuity to begin, all money paid shall be refunded to the purchaser or his legal representatives with interest at the rate of 4 p.c., compounded yearly.

From Sept. 1, 1908, the date of the inception of the Government annuities system, up to and inclusive of Mar. 31, 1938, the total number of annuity contracts issued was 42,623. Of these contracts, 3,608 have been cancelled, leaving in force on Mar. 31, 1938, 39,015 contracts. The total amount of purchase money received during the same period was $115,109,178. Table 27 gives the details of annuities contracted for and purchase money received from 1909 to 1938, by fiscal years.

27.—Government Annuities Contracted for, and Purchase Money Received, fiscal years 1909-38.

Fiscal Year.	Contracts.	Purchase Money Received.	Fiscal Year.	Contracts.	Purchase Money Received.
	No.	$		No.	$
1909[1]	66	50,391	1925	486	1,606,822
1910	566	434,491	1926	668	1,938,921
1911	1,069	393,441	1927	503	1,894,885
1912	1,032	441,601	1928	1,223	3,843,088
1913	373	417,136	1929	1,328	4,272,419
1914	318	390,887	1930	1,257	3,156,475
1915	264	314,765	1931	1,772	3,612,234
1916	325	441,696	1932	1,726	4,194,384
1917	285	432,272	1933	1,375	3,547,345
1918	187	332,792	1934	2,412	7,071,439
1919	147	322,154	1935	3,930	13,376,400
1920	204	408,719	1936	6,357	21,281,981
1921	195	531,800	1937	7,806	23,614,824
1922	277	748,160	1938	5,724	13,550,483
1923	339	1,028,353			
1924	409	1,458,819	**Totals**	**42,623**	**115,109,178**

[1] Seven months.

Statistics of the annuities fund and value of contracts issued are given in Tables 28 and 29. On Mar. 31, 1938, 16,205 immediate annuities and 22,810 deferred annuities were in force. The total value of these annuities on that date was $107,644,200 and the amount of annuity under vested contracts in force on that date was $6,700,996.

The valuation shown on Mar. 31, 1938, established all outstanding contracts on the basis of the revised rates charged for Government annuities effective as of Feb. 1, 1938.

28.—Government Annuities Fund Statement, fiscal years 1934-38.

Item.	1934.	1935.	1936.	1937.	1938.
	$	$	$	$	$
Assets.					
Fund at beginning of year	29,163,903	35,023,476	46,906,192	66,441,822	87,984,936
Receipts during the year, less payments	5,859,573	11,882,716	19,535,630	21,543,114	19,659,264
Fund at end of year	35,023,476	46,906,192	66,441,822	87,984,936	107,644,200
Liabilities.					
Net present value of all outstanding contracts	35,169,533	47,178,019	66,982,654	88,224,794	107,644,200
Receipts.					
For immediate annuities	5,292,073	9,904,714	14,881,398	14,883,153	6,740,308
For deferred annuities	1,809,924	3,577,200	6,458,204	8,841,716	6,854,850
Interest on fund	1,230,751	1,527,547	2,111,374	3,039,106	3,615,612
Refunds	5,057	3,980	737	Nil	Nil
For amount transferred to maintain reserve	184,238	146,057	271,827	540,832	8,941,196
Totals, Receipts	**8,522,043**	**15,159,498**	**23,723,540**	**27,304,807**	**26,151,966**
Payments.					
Payments under vested annuity contracts	2,598,070	3,115,031	4,097,230	5,556,153	6,369,494
Return of premiums with interest	33,842	56,237	33,059	95,496	78,533
Return of premiums without interest	30,558	105,514	57,621	110,044	44,675
Balance at end of year	5,859,573	11,882,716	19,535,630	21,543,114	19,659,264
Totals, Payments	**8,522,043**	**15,159,498**	**23,723,540**	**27,304,807**	**26,151,966**

29.—Valuation of Annuity Contracts Issued, as at Mar. 31, 1937 and 1938.

Description of Contract.	1937.			1938.		
	Annuity Contracts.	Amount of Annuities.	Net Value at Mar. 31, of Outstanding Contracts.	Annuity Contracts.	Amount of Annuities.	Net Value at Mar. 31, of Outstanding Contracts.
	No.	$	$	No.	$	$
Immediate annuities	7,528	3,115,463	26,867,095	8,390	3,336,785	33,325,158
Immediate guaranteed	4,700	1,962,411	23,542,652	5,392	2,263,450	29,219,119
Immediate last survivor	2,190	1,026,424	12,941,387	2,423	1,100,761	15,696,690
Deferred annuities	19,267	–	24,873,660	22,810	–	29,403,233
Totals	**33,685**	**6,104,298**[1]	**88,224,794**	**39,015**	**6,700,996**[1]	**107,644,200**

[1] Amount of immediate annuities.

It will be seen from the statements above that Government annuities have grown steadily in favour, especially since 1921, the fund reaching a total of $107,644,200 on Mar. 31, 1938.

CHAPTER XXIV.—COMMERCIAL FAILURES.

According to Sec. 91 of the British North America Act, "the exclusive legislative authority of the Parliament of Canada" extends to bankruptcy and insolvency legislation, and an Insolvency Act (32-33 Vict., c. 16) was actually passed by the Dominion Parliament in 1869, applying to the four original provinces. This Act was in force for four years and was renewed by c. 46 of the Statutes of 1874, while in 1875 a new Insolvency Act (38 Vict., c. 16) applicable to the whole Dominion was passed, but was repealed in 1880. After this there was no Dominion legislation on the subject of bankruptcy until 1919. During the interval of nearly 40 years commercial failures were handled under provincial legislation, and the statistics relating to such failures during this period were compiled and published by Dun's and Bradstreet's commercial agencies. In 1919 a general Dominion Bankruptcy Act was passed (9-10 Geo. V, c. 36). Statistics of commercial failures dealt with under this Act since it came into force in 1920 have been compiled and published by the Dominion Bureau of Statistics. (See p. 1006.)

Table 1 below gives summary statistics of industrial and commercial failures in Canada, by classes for 1934-38, and by classes and provinces for 1938. At p. 969 of the 1936 Year Book a historical table gives failures for Canada and Newfoundland by classes for the years 1915 to 1935. Early in 1936, however, Dun and Bradstreet, Incorporated, adopted a new method of classification. The principal changes consisted of setting up a new group of construction enterprises previously included in manufacturing and a new class for commercial service. Real estate companies, holding, and other financial companies, and agents of various kinds were dropped. These changes have had the effect of confining the failure records more to industrial and commercial lines of activity, and liabilities are reduced more in proportion to the number of failures since the companies eliminated usually ran high in indebtedness. The present figures of Table 1 are not comparable with those given at p. 969 of the 1936 Year Book, to which the reader is referred for earlier historical data, both because of the above reasons and because the earlier statistics cover Canada and Newfoundland whereas these are for Canada only.

1.—Industrial and Commercial Failures in Canada, by Classes, 1934-38, and by Provinces, 1938.

(From Dun and Bradstreet, Incorporated.)

Year and Province.	Manufacturing.		Wholesale Trade.		Retail Trade.		Construction.		Commercial Service.		Totals.	
	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.	No.	Liabilities.
		$'000		$'000		$'000		$'000		$'000		$'000
Totals, 1934	**303**	**6,056**	**82**	**2,518**	**1,068**	**8,767**	**63**	**950**	**84**	**751**	**1,600**	**19,042**
Totals, 1935	**285**	**5,044**	**65**	**1,249**	**879**	**5,202**	**58**	**689**	**80**	**910**	**1,367**	**13,094**
Totals, 1936	**260**	**4,459**	**63**	**1,454**	**806**	**4,331**	**37**	**574**	**72**	**496**	**1,238**	**11,314**
Totals, 1937	**190**	**2,875**	**51**	**925**	**630**	**3,041**	**33**	**228**	**48**	**357**	**952**	**7,426**
1938.												
P.E. Island	Nil	–	Nil	–	Nil	–	Nil	–	Nil	–	Nil	–
Nova Scotia	3	43	1	126	22	188	1	4	1	24	28	385
New Brunswick	10	534	1	174	31	179	Nil	–	1	7	43	894
Quebec	113	2,022	25	498	309	2,024	20	136	15	165	482	4,845
Ontario	83	1,890	17	204	187	1,288	17	125	12	110	316	3,617
Manitoba	10	93	5	105	62	354	Nil	–	Nil	–	77	552
Saskatchewan	1	4	2	13	50	228	"	–	2	10	55	255
Alberta	Nil	–	Nil	–	24	90	"	–	Nil	–	24	90
British Columbia	5	174	4	109	14	113	1	2	"	–	24	398
Totals, 1938	**225**	**4,760**	**55**	**1,229**	**699**	**4,464**	**39**	**267**	**31**	**316**	**1,049**	**11,036**

Table 2 summarizes total failures and gives assets and liabilities for such failures, by provinces.

2.—Industrial and Commercial Failures in Canada, by Provinces, 1936-38.

(From Dun and Bradstreet, Incorporated.)

NOTE.—Figures for 1934 and 1935 will be found at p. 951 of the 1937 Year Book.

Province.	Failures.			Assets.			Liabilities.		
	1936.	1937.	1938.	1936.	1937.	1938.	1936.	1937.	1938.
	No.	No.	No.	$'000	$'000	$'000	$'000	$'000	$'000
Prince Edward Island....	8	2	Nil	20	1	-	84	5	-
Nova Scotia..............	36	18	28	68	43	130	239	180	385
New Brunswick..........	16	15	43	76	93	425	127	91	894
Quebec....................	526	377	482	2,966	2,159	2,928	5,257	3,241	4,845
Ontario...................	432	359	316	2,863	1,862	2,790	4,090	2,484	3,617
Manitoba..................	90	68	77	348	229	434	536	364	552
Saskatchewan............	37	42	55	103	102	177	181	232	255
Alberta....................	53	44	24	323	44	70	334	273	90
British Columbia.........	40	27	24	293	280	232	466	556	398
Totals...............	**1,238**	**952**	**1,049**	**7,060**	**4,813**	**7,186**	**11,314**	**7,426**	**11,036**

Failures, by Divisions of Industry.—In every year the great majority of the commercial failures of the country are found among the trading establishments, which are so much more numerous than the manufacturing. Thus, according to the records of Dun and Bradstreet, Incorporated, out of a total of 1,049 commercial failures in Canada in 1938, 699 were among the retail trading establishments, including 211 in foods and 125 in apparel.

Out of the 225 manufacturers who failed, 67 were in the textiles business, 44 in foods, and 27 among manufacturers of forest products. The figures of commercial failures are analysed in detail for the years 1936, 1937, and 1938, in Table 3.

3.—Industrial and Commercial Failures in Canada, by Divisions of Industry, 1936-38.

(From Dun and Bradstreet, Incorporated.)

NOTE.—Figures for 1934 and 1935 will be found at p. 951 of the 1937 Year Book.

Industry and Division.	Failures.			Liabilities.		
	1936.	1937.	1938.	1936.	1937.	1938.
Manufacturing—	No.	No.	No.	$'000	$'000	$'000
Foods..	56	55	44	621	560	563
Textiles...	84	41	67	988	390	894
Forest products..................................	19	20	27	250	995	1,372
Paper, printing and publishing..................	11	14	17	1,017	152	129
Chemicals and drugs.............................	8	11	6	33	39	32
Fuels..	5	2	4	46	11	179
Leather and leather products....................	14	9	15	245	171	144
Stone, clay, glass and products..................	9	5	6	114	174	185
Iron and steel......................................	9	2	4	84	10	223
Machinery..	3	6	5	264	72	86
Transportation equipment........................	8	1	6	73	4	112
All other...	34	24	24	724	297	841
Totals, Manufacturing...............	**260**	**190**	**225**	**4,459**	**2,875**	**4,760**

3.—Industrial and Commercial Failures in Canada, by Divisions of Industry, 1936-38—concluded.

Industry and Division.	Failures.			Liabilities.		
	1936.	1937.	1938.	1936.	1937.	1938.
	No.	No.	No.	$'000	$'000	$'000
Wholesale Trade—						
Farm products, foods, groceries	17	15	17	129	526	430
Clothing and furnishings	1	1	6	6	15	157
Dry goods and textiles	3	3	5	89	30	229
Lumber, building materials, hardware	8	9	3	747	72	40
Chemicals and drugs	1	1	2	4	2	7
Fuels	2	1	1	19	1	13
Automotive products	6	3	3	93	27	7
Supply houses	8	4	7	33	36	102
All other	17	14	11	334	216	244
Totals, Wholesale Trade	**63**	**51**	**55**	**1,454**	**925**	**1,229**
Retail Trade—						
Foods	245	189	211	845	563	767
Farm supplies, general stores	69	72	72	618	502	691
General merchandise	31	31	44	219	186	307
Apparel	183	96	125	969	472	628
Furniture, household furniture	16	17	20	148	224	67
Lumber, building materials, hardware	46	41	33	339	246	514
Automotive products	46	37	33	292	326	302
Restaurants	74	63	74	226	137	434
Drugs	24	21	23	70	101	78
All other	72	63	64	605	284	676
Totals, Retail Trade	**806**	**630**	**699**	**4,331**	**3,041**	**4,464**
Construction—						
General contractors	13	11	6	174	62	73
Carpenters and builders	5	4	15	201	34	78
Building sub-contractors	19	17	16	199	123	107
Other contractors	Nil	1	2	-	9	9
Totals, Construction	**37**	**33**	**39**	**574**	**228**	**267**
Commercial Service—						
Cleaners and dyers, tailors	13	5	4	44	18	12
Haulage, buses, taxis, etc	11	10	12	71	171	145
Hotels	14	8	3	206	43	67
Laundries	4	4	3	18	58	49
Undertakers	9	5	2	29	14	31
All other	21	16	7	128	53	12
Totals, Commercial Service	**72**	**48**	**31**	**496**	**357**	**316**
Grand Totals	**1,238**	**952**	**1,049**	**11,314**	**7,426**	**11,036**

Assignments under the Bankruptcy and Winding Up Acts.—Under the Bankruptcy and Winding Up Acts (R.S.C., 1927, cc. 11 and 213) certain documents relating to assignments have, since 1920, been forwarded to the Dominion Statistician for statistical analysis. Table **4** gives the resulting figures of failures, by provinces, for 1922 and subsequent years, and Table **5** is a classification by branches of business. Table **6** gives the assets and liabilities of the assignors. A detailed analysis of the 1937 and 1938 failures, by provinces and branches of business, is made in Tables **7** and **7A.**

4.—Commercial Failures in Canada, by Provinces, 1922-38.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1922	15	121	131	1,589	1,058	284	272	299	156	3,925
1923	16	155	67	1,181	970	258	280	323	158	3,408
1924	3	69	67	907	835	100	131	150	57	2,319
1925	4	71	67	758	721	85	77	139	74	1,996
1926	4	63	74	654	655	84	68	113	58	1,773
1927	4	66	74	658	681	97	54	135	72	1,841
1928	4	90	56	767	758	103	63	126	70	2,037
1929	1	71	61	927	762	91	84	101	69	2,167
1930	3	61	45	1,011	776	113	146	152	95	2,402
1931	7	51	74	795	793	109	152	131	104	2,216
1932	9	62	80	968	889	86	91	131	104	2,420
1933	10	55	42	935	730	67	59	88	58	2,044
1934	8	42	38	779	474	56	36	42	57	1,532
1935	4	28	37	632	390	46	66	83	28	1,314
1936	6	29	15	589	384	33	57	48	37	1,198
1937	Nil	23	23	623	335	23	34	25	40	1,126
1938	4	35	31	587	390	67	56	20	27	1,217

5.—Commercial Failures in Canada, by Branches of Business, 1924-38.

Year.	Trade.	Manufactures.	Agriculture.	Logging and Fishing.	Mining.	Construction.	Transportation and Public Utilities.	Finance.	Service.	Not Classified.	Total.
1924	1,317	329	204	14	22	44	36	8	129	216	2,319
1925	1,026	403	158	14	15	50	21	5	220	84	1,996
1926	805	390	135	27	20	52	34	1	225	84	1,773
1927	818	430	116	30	26	63	36	Nil	243	79	1,841
1928	884	505	108	31	23	70	45	5	263	103	2,037
1929	1,100	443	125	4	11	61	21	5	239	158	2,167
1930	1,204	488	115	12	9	55	48	29	283	159	2,402
1931	1,102	464	125	5	7	61	42	21	255	134	2,216
1932	1,171	468	190	9	6	83	43	7	290	153	2,420
1933	1,089	357	92	1	5	57	26	12	246	159	2,044
1934	799	217	82	3	2	59	20	16	217	117	1,532
1935	594	180	173	3	10	62	11	16	186	79	1,314
1936	536	191	123	2	12	53	10	11	189	71	1,198
1937	584	182	104	5	21	46	7	15	123	39	1,126
1938	667	200	101	1	11	50	9	4	107	67	1,217

6.—Estimated Assets and Liabilities of Commercial Failures in Canada, 1922-38.

Year.	Estimated Grand Total Assets.	Estimated Grand Total Liabilities.	Year.	Estimated Grand Total Assets.	Estimated Grand Total Liabilities.
	$	$		$	$
1922	52,336,488	63,692,219	1931	46,839,179	52,552,900
1923	62,127,489	61,617,527	1932	40,604,208	51,629,303
1924	43,194,035	48,105,397	1933	27,033,240	32,953,858
1925	26,968,371	32,153,697	1934	19,257,469	23,598,260
1926	24,676,661	32,291,125	1935	12,174,401	17,567,002
1927	23,197,894	30,634,469	1936	10,703,620	15,144,945
1928	26,583,462	32,455,437	1937	10,704,079	14,303,362
1929	32,064,027	38,747,638	1938	8,782,191	14,017,061
1930	44,048,171	48,164,065			

7.—Commercial Failures in Canada, by Provinces and Branches of Business, 1937, with Totals for 1936.

Branch of Business.	P.E.I. and N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total for 1937.	Total for 1936.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Trade—										
General stores	1	3	48	13	2	5	3	2	77	82
Grocery	4	3	56	48	2	1	3	3	120	88
Confectionery	Nil	Nil	13	7	Nil	Nil	Nil	Nil	20	22
Drink and tobacco	"	"	6	4	"	"	"	"	10	13
Fish and meat	1	1	27	11	1	"	"	"	41	41
Boots and shoes	1	1	10	9	2	"	"	"	23	24
Dry goods	3	1	50	24	Nil	3	1	2	84	39
Clothing	Nil	2	26	8	"	2	1	2	41	64
Furniture	1	Nil	5	2	"	Nil	Nil	2	10	6
Books and stationery	Nil	"	6	7	1	"	"	Nil	14	6
Automobile	"	"	4	4	Nil	"	"	"	8	9
Hardware	"	1	10	15	"	"	1	1	28	25
Electrical apparatus	"	Nil	5	3	"	"	Nil	Nil	8	4
Jewellery	"	"	11	5	"	"	"	1	17	17
Coal and wood	"	1	6	5	1	"	"	Nil	13	16
Drugs and chemicals	"	Nil	5	6	Nil	"	1	"	12	9
Miscellaneous	2	"	40	10	"	"	3	3	58	71
Totals, Trade	**13**	**13**	**328**	**181**	**9**	**11**	**13**	**16**	**584**	**536**
Manufacturing—										
Vegetable foods	Nil	Nil	9	10	Nil	1	2	Nil	22	41
Drink and tobacco	"	"	2	Nil	"	Nil	Nil	"	2	4
Animal foods	"	1	3	"	"	"	"	"	4	3
Fur and leather	1	Nil	5	4	"	"	"	"	10	19
Pulp and paper	Nil	"	7	4	"	"	"	2	13	5
Textiles	"	"	8	4	"	"	"	Nil	12	11
Clothing	"	"	23	11	"	"	"	"	34	36
Lumber and manufactures	1	2	12	1	1	"	1	5	23	25
Iron and steel	Nil	Nil	5	2	Nil	"	Nil	Nil	7	12
Non-ferrous metals	"	"	4	7	"	"	"	1	12	1
Non-metallic minerals	"	"	6	1	"	"	"	1	8	9
Drugs and chemicals	"	"	4	4	"	"	"	Nil	8	Nil
Miscellaneous	"	"	22	5	"	"	"	"	27	25
Totals, Manufacturing	**2**	**3**	**110**	**53**	**1**	**1**	**3**	**9**	**182**	**191**
Service—										
Garages	1	1	10	6	1	1	1	Nil	21	16
Other customs and repairs	Nil	1	14	14	Nil	Nil	Nil	1	30	48
Personal service	1	2	18	4	"	"	1	1	27	59
Restaurants	Nil	Nil	16	6	1	"	"	2	25	22
Professional service	"	"	7	2	Nil	"	"	1	10	19
Recreational service	"	"	1	1	"	"	"	1	3	10
Business service	"	"	7	Nil	"	"	"	Nil	7	15
Totals, Service	**2**	**4**	**73**	**33**	**2**	**1**	**2**	**6**	**123**	**189**
Other—										
Agriculture	3	3	40	26	8	20	3	1	104	123
Mining	Nil	Nil	6	11	1	Nil	Nil	3	21	12
Logging, fishing, and trapping	"	"	3	2	Nil	"	"	Nil	5	2
Construction	1	"	30	11	2	1	"	1	46	53
Transportation and public utilities	Nil	"	4	3	Nil	Nil	"	Nil	7	10
Finance	1	"	10	4	"	"	"	"	15	11
Totals, Other	**5**	**3**	**93**	**57**	**11**	**21**	**3**	**5**	**198**	**211**
Not classified	1	Nil	19	11	Nil	Nil	4	4	39	71
Grand Totals	**23**	**23**	**623**	**335**	**23**	**34**	**25**	**40**	**1,126**	**1,198**

7A.—Commercial Failures in Canada, by Provinces and Branches of Business, 1938, with Totals for 1937.

Branch of Business.	P.E.I. and N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total for 1938.	Total for 1937.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Trade—										
General stores	4	2	49	37	6	2	4	1	105	77
Grocery	4	3	58	53	4	3	2	2	129	120
Confectionery	Nil	Nil	14	8	Nil	Nil	Nil	Nil	22	20
Drink and tobacco	“	“	7	2	“	“	“	“	9	10
Fish and meat	“	“	18	9	1	2	“	“	30	41
Boots and shoes	1	“	8	5	1	1	“	“	16	23
Dry goods	1	“	36	22	Nil	Nil	“	2	61	84
Clothing	2	3	44	40	4	2	“	3	98	41
Furniture	Nil	Nil	8	7	1	2	“	Nil	18	10
Books and stationery	1	1	7	2	1	Nil	“	“	12	14
Automobile	1	Nil	3	2	Nil	“	“	“	6	8
Hardware	Nil	“	8	4	1	1	“	2	16	28
Electrical apparatus	1	“	5	3	1	Nil	“	Nil	10	8
Jewellery	Nil	“	9	8	1	“	“	“	18	17
Coal and wood	“	“	5	8	2	“	“	“	15	13
Drugs and chemicals	2	2	8	6	1	3	“	“	22	12
Miscellaneous	5	3	46	15	3	4	1	3	80	58
Totals, Trade	**22**	**14**	**333**	**231**	**27**	**20**	**7**	**13**	**667**	**584**
Manufacturing—										
Vegetable foods	2	2	22	10	2	Nil	Nil	1	39	22
Drink and tobacco	Nil	Nil	Nil	Nil	Nil	“	“	Nil	Nil	2
Animal foods	1	“	8	5	“	“	“	“	14	4
Fur and leather	Nil	“	7	6	1	“	“	“	14	10
Pulp and paper	“	“	2	Nil	Nil	“	“	“	2	13
Textiles	“	“	7	3	1	1	“	“	12	12
Clothing	3	2	19	9	2	Nil	“	“	35	34
Lumbering and manufactures	1	Nil	11	8	Nil	“	“	2	22	23
Iron and steel	Nil	“	2	2	1	“	“	1	6	7
Non-ferrous metals	“	“	5	3	1	“	“	Nil	9	12
Non-metallic minerals	“	“	5	2	Nil	“	“	“	7	8
Drugs and chemicals	“	“	3	1	“	“	“	“	4	8
Miscellaneous	2	2	18	12	1	1	“	“	36	27
Totals, Manufacturing	**9**	**6**	**109**	**61**	**9**	**2**	**Nil**	**4**	**200**	**182**
Service—										
Garages	1	1	8	5	2	1	Nil	Nil	18	21
Other customs and repairs	1	Nil	4	2	2	Nil	“	“	9	30
Personal service	2	3	2	4	4	“	“	“	15	27
Restaurants	1	2	25	19	2	1	“	1	51	25
Professional service	1	Nil	5	2	2	Nil	“	Nil	10	10
Recreational service	Nil	“	1	Nil	Nil	“	“	“	1	3
Business service	“	“	2	1	“	“	“	“	3	7
Totals, Service	**6**	**6**	**47**	**33**	**12**	**2**	**Nil**	**1**	**107**	**123**
Other—										
Agriculture	Nil	2	33	19	9	28	7	3	101	104
Mining	1	1	4	5	Nil	Nil	Nil	Nil	11	21
Logging, fishing, and trapping	Nil	Nil	1	Nil	“	“	“	“	1	5
Construction	“	“	20	14	6	3	4	3	50	46
Transportation and public utilities	“	“	5	4	Nil	Nil	Nil	Nil	9	7
Finance	“	“	2	2	“	“	“	“	4	15
Totals, Other	**1**	**3**	**65**	**44**	**15**	**31**	**11**	**6**	**176**	**198**
Not classified	1	2	33	21	4	1	2	3	67	39
Grand Totals	**39**	**31**	**587**	**390**	**67**	**56**	**20**	**27**	**1,217**	**1,126**

Administration of Bankrupt Estates.—The administration of bankrupt estates is now supervised by the Superintendent of Bankruptcy (appointed in 1932) with the object of conserving as far as possible the assets of bankrupt estates for the benefit of the creditors. Figures from the first report are given at p. 1039 of the 1934-35 Year Book, and those for subsequent years are to be found in later editions. Table 8 shows the details of bankruptcy administration, by provinces, for 1938, together with totals for all years since the first report was published.

8.—Totals of Assets, Liabilities, Assets Realized, and Costs of Administration in Bankrupt Estates Closed, 1933-38, and by Provinces, 1938.

(From the Annual Report of the Superintendent of Bankruptcy.)

Year and Province or City.	Estates Closed.	Assets as Estimated by Debtor.	Liabilities as Estimated by Debtor.	Total Realization.	Cost of Administration.	Percentage of Cost.	Paid to Creditors.[1]
	No.	$	$	$	$	p.c.	$
Totals, 1933	**850**	**9,207,503**	**8,629,392**	**1,880,015**	**423,833**	**22·6**	**1,449,392**
Totals, 1934	**1,620**	**14,887,298**	**20,342,883**	**3,800,996**	**880,803**	**23·2**	**2,908,020**
Totals, 1935	**1,198**	**14,039,847**	**19,402,471**	**2,797,009**	**763,617**	**27·3**	**2,020,868**
Totals, 1936	**1,069**	**10,314,455**	**14,018,966**	**2,265,125**	**603,182**	**26·6**	**1,661,943**
Totals, 1937	**1,149**	**18,397,022**	**20,431,515**	**2,805,743**	**770,563**	**27·5**	**2,035,180**
1938.							
Prince Edward Island	1	2,350	3,805	1,850	375	20·3	1,475
Nova Scotia	16	164,399	285,017	48,869	8,738	17·9	40,131
New Brunswick	22	140,809	214,573	31,963	11,085	34·7	20,878
Quebec[2]	267	2,401,078	3,139,459	664,925	152,945	23·0	511,982
Montreal	350	5,964,938	7,907,233	556,492	174,680	31·4	381,812
Ontario[2]	238	3,654,658	4,079,164	618,859	199,107	32·2	419,752
Toronto	94	2,234,322	4,009,657	277,837	83,153	29·9	194,684
Manitoba	17	100,231	173,615	32,388	9,823	30·3	22,566
Saskatchewan	21	281,382	352,346	39,297	12,094	30·8	27,201
Alberta	42	521,796	584,908	114,825	35,929	31·3	78,895
British Columbia	30	529,313	990,354	139,257	29,556	21·2	109,701
Totals, 1938	**1,098**	**15,995,276**	**21,740,131**	**2,526,562**	**717,485**	**28·4**	**1,809,077**

[1] In addition to the payments by the trustee, secured creditors valued their security or realized it themselves without the intervention of the trustee to an amount of approximately $4,264,633.

[2] Exclusive of the city shown separately.

CHAPTER XXV.—EDUCATION.*

Section 1.—Schools, Colleges, and Universities.

The British North America Act assigned public education in Canada, except in the case of the native Indian population, to the jurisdiction of the Provincial Governments. A system of public elementary and secondary education, financed mainly by local school authorities but assisted by provincial grants, has developed in each province. There are some private schools in all provinces (*i.e.*, schools that are not conducted by publicly-elected or publicly-appointed boards, and that are not financed out of public money), but their enrolment is not large in comparison with that of the public schools. At the level of higher education, six provinces have each a provincially-supported university, and the remaining three each have one or more colleges supported out of provincial funds.

Table 2 of this Chapter gives statistics of enrolment in four different categories of educational institutions: (1) Provincially-Controlled Schools; (2) Privately-Controlled Schools; (3) Dominion Indian Schools; (4) Universities and Colleges. Subsections follow, that treat each of the four groups separately, except Indian Schools, for which data are given in Chapter XXVIII, Miscellaneous Administration, along with other information on Indian Affairs.

School Attendance in Relation to Educational Status of the Entire Population.†—School attendance data, collected from schools annually, do not give the numbers not at school but who are of school age. Even the number of persons who, at a fixed date, report themselves as having been at school is not necessarily the same as the number of persons who attended school during the year. In a rapidly moving population the difference may be considerable. Much less do annual figures show the penetration of schooling into the population structure as a whole. In this respect a study of census data must be depended upon.

Educational Status of the 1931 Population.—In considering the educational status of those now living in Canada, not only present school attendance but school attendance as far back as 1861 must be considered, since the ages at which schooling took place may have been anywhere between 5 and 19 years for persons now 75 years of age or over. Unfortunately, records of school attendance are not available for 1861 or 1891 but, from those of the other censuses, data can be presented in such a way as to show the numbers of the present population who were of school age at each of those dates and an approximation of the educational status of the 1931 population can thus be obtained, in spite of the fact that the figures are qualified by the several factors brought out in the footnotes to Table **1**.

New School Curricula.—One of the noteworthy features of education in most of the English-language provinces during the past few years has been revision of the school curriculum—the most thorough-going revisions in the hundred years of

---

* Revised, except for those parts otherwise indicated, by J. E. Robbins, M.A., Ph.D., Chief, Education Statistics Branch, Dominion Bureau of Statistics. This Branch is concerned with compiling and publishing comparable data relating to educational institutions throughout Canada, and to this end co-operates with the Provincial Departments of Education. A list of the publications of this Branch will be found in Chapter XXIX, Section 1, under "Education".

† Prepared by M. C. MacLean, M.A., F.S.S., Chief of Social Analysis, Dominion Bureau of Statistics.

1.—Number of Persons of the 1931 Population who were of School Age (5-19) in 1931, and at the dates of the Seven Previous Censuses.

Census Year.	Canadian Born.[1]	Immigrant.[1]	Total.	Number Attending School.	Per Cent Attending School.
	No.	No.	No.		
1931	3,017,687	3,436	3,021,123	1,983,971	65·67
1921	2,188.938	227,622	2,416,560	1,483,042	61·37
1911	1,394,569	244,785	1,639,354	867,874	52·94
1901	1,133,255	271,494	1,404,749	733,700	52·23
1891	877,125	96,231[2]	973,356[2]	504,198[3]	51·80[3]
1881	606,627	97,653[2]	704,280[2]	361,999[4]	51·40[4]
1871	366,044	65,581[2]	431,625[2]	216,373[4]	50·13[4]
1861	124,666	26,411[2]	151,077[2]	74,027[3]	49·00[3]

[1] The fact that it is impossible to separate repatriated Canadians from either the Canadian born or immigrants leads to a slight duplication. [2] Not comparable with first four figures because it includes *all* immigrants 5-19 years of age arriving before 1901 whether they were in Canada at ages 5-19 or not. [3] Estimated. [4] School attendance figures for 1871 and 1881 are for all ages. Populations of Yukon and Northwest Territories are included in 1871 population.

public education in Canada. Teachers are given much more freedom and responsibility in interpreting them; 'activity programs', 'enterprises' and 'projects' are encouraged; the emphasis on health teaching, physical education, and social studies is substantially increased; the old 8-4 division of grades as between elementary and secondary education is changed to 6-3-3; and there is very much less use of departmental examinations to test successful completion of a year's work. In some provinces it is now possible to matriculate to the university without a single examination external to the school. The old entrance-to-high school examination, obligatory for all students twenty years ago, is now taken by only about one-fourth of the students, considering the provinces together, and the proportion writing external examinations at the end of Grades IX and X is lower still.

Changes in Rural Administration.—Another change in the educational structure, widely advocated, and beginning to make its appearance, is the adoption of a larger unit of administration for rural schools. The typical unit of rural school administration in the past has been a community of a few dozen families responsible for raising independently the greater part of the money required to operate its schools. (For a description of the system of school administration, see pp. 960-962 of the 1937 Year Book.) Difficulties in this system have long been obvious, and one province, Alberta, has now abandoned it. In a period of three years, beginning in 1936, the Alberta Department of Education is bringing its more than 3,000 rural school districts into some fifty school divisions for financial and administrative purposes. Two or three similar units have been established in British Columbia, while Manitoba and Ontario, in some localities, are making headway in consolidating educational services on a municipal or township basis, such as has been used in Quebec. For several years the Nova Scotia and New Brunswick Departments of Education have been giving close attention to the possibility of developing larger units.

Adult Education.—Post-school education is a field that has received greatly increased attention in Canada during recent years. The Canadian Association for Adult Education, established in 1935, is one of the very few Dominion-wide educational organizations to maintain a full-time staff. It is being financed largely by grants from the Carnegie Corporation of New York and the provincial Departments of Education. Its director, at the annual meeting in 1938, reported that the number of people following more or less formal courses, apart from the regular school and university enrolment, was in the neighbourhood of 200,000. The Association aims to assist the various agencies whose work is represented by this enrolment, as well as to encourage more informal types of adult education. It is collaborating with the Canadian Broadcasting Corporation, for instance, in its attempt to train leaders for listening groups and make radio a more influential educational factor. It is co-operating with the National Film Society in the development of Canadian cultural and educational films. The Film Society, set up in 1935, has a national office in Ottawa and branches in the larger cities from coast to coast where regular programs of special films are screened. The Association for Adult Education also takes an active interest in library problems.

Some of the most distinctive work of Canadian universities has been done by their extension services on behalf of the population at large. The University of Alberta is outstanding in the variety of services offered, while others have won an international reputation for work of a specialized kind—notably St. Francis Xavier University in Nova Scotia with its more than one thousand study groups, which aim at bettering the economic and social condition of communities through the formation of co-operative enterprises. The extension service of the University of Toronto has given particular attention to assisting the Workers' Educational Association, which began as an Ontario organization but now has classes in larger centres throughout the country. It is not possible to describe here the extent of adult education activities of the universities, but their increasing importance is indicated.

The provincial Departments of Education, too, are giving greater attention to the educational needs of the adult population. The biennial conference of their representatives in 1938 (the Canadian Education Association) took adult education for its central theme. Due in some measure perhaps to the Association's interest in adult education, the Association was joined by Newfoundland and became the Canada and Newfoundland Education Association.

Research in Education.—The many changes of recent years, completed or contemplated, in Canadian education have led educators to feel a greater need for scientific investigation of their problems, and, since most of the problems are common to a majority of the provinces, they have thought in terms of creating a medium through which they could collaborate in research. Plans have been on foot for a considerable period and resulted, during the early months of 1939, in the formation of a Canadian Council for Educational Research. This Council was supported by Departments of Education through the medium of the Canada and Newfoundland Education Association, by the provincial teachers' organizations through the agency of the Canadian Teachers' Federation, and with assistance, for the initial years, from the Carnegie Corporation of New York. The Council is composed of seven members: five on a regional basis (one from each of British Columbia, the Prairie Provinces, Ontario, Quebec, and the Maritime Provinces), the Director of Research for the Canadian Teachers' Federation, and the Chief of the Education Branch of the Dominion Bureau of Statistics.

A record of the first topics proposed for the Council's consideration indicates some of the problems currently to the fore in the minds of Canadian educators:

(1) relations between the school systems and occupations; (2) instruction by correspondence; (3) teacher training; (4) the selective character of Canadian education; (5) tests and examinations to measure the outcome of modern programs of study; (6) the development of educational records which will give the maximum amount of useful information; (7) the effectiveness and practicability of instruction by means of radio and visual materials.

Subsection 1.—Provincially-Controlled Schools.

An outline of the provincial systems of school administration is given on pp. 960-962 of the 1937 Year Book. Summary statistics of these along with privately-controlled schools, Dominion schools, and universities and colleges are given in Table 2.

2.—Enrolment in Educational Institutions in Canada, by Provinces, School Year, 1936-37.

Type of Institution.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Provincially-Controlled Schools—										
Ordinary and technical day schools	18,146	116,656	94,179	585,477[1]	668,627	140,542	215,646	167,950	118,431	2,125,829
Evening schools	Nil	3,589	1,748	15,414[1]	28,364	5,240	1,346	1,109	8,794	65,604
Correspondence courses	"	862	Nil	Nil	2,500	1,997	9,182	1,554	3,377	19,472
Special schools[2]	"	423	"	1,476	2,391	561	124	215	92	5,282
Normal schools	[3]	304	302	3,002	1,082	294	621	458	215	6,278
Privately-Controlled Schools—										
Ordinary day schools	597	2,977	2,395	57,031	12,046	5,157	1,931	3,594	4,686	90,414
Business training schools	188	720	373	4,133	7,548	3,164	912	1,641	1,853	20,532
Dominion Indian schools	19	450	338	1,651	4,665	2,501	2,336	1,986	3,934	18,297
Universities and Colleges—										
Preparatory courses	470	302	498	14,341	2,240	509	472	255	5	19,092
Courses of university standard	100	2,555	1,295	11,709	18,911	3,289	3,370	2,268	3,200	46,697
Other courses at university[4]	Nil	10,244	125	10,426	17,600	1,556	1,320	275	1,031	42,577
Totals	**19,520**	**139,082**	**101,253**	**704,660**	**765,974**	**164,810**	**237,260**	**181,305**	**145,618**	**2,460,074**[6]
Populations, 1937[5]	93,000	542,000	440,000	3,135,000	3,711,000	717,000	939,000	778,000	751,000	11,120,000[7]

---

[1] 1935-36 figure. [2] Schools for the blind, deaf, or mentally defective. These are boarding schools, and many of the pupils are from provinces other than the one in which they are at school. [3] Included with "Universities and Colleges—Preparatory courses". [4] Includes also those in the Departmental summer schools for teachers in Ontario and British Columbia, not held at universities or colleges. [5] Official estimates as at June 1, see p. 113. [6] Includes 172 in ordinary day schools and 417 in Dominion Indian schools for Yukon and the Northwest Territories. [7] Includes 14,000 estimated population for Yukon and the Northwest Territories.

A table at p. 963 of the 1937 Year Book includes the record of annual enrolment by provinces from 1911 to 1935, together with the record of average daily attendance shown in Table 3 below. The record of average daily attendance is the more comparable one, as between provinces, and probably the more significant for most purposes. Both figures have been practically at a standstill, or declining, in all provinces except Quebec, for several years, due to the annually decreasing number of younger children entering the schools. The decrease would be much more pronounced were it not for the tendency for older children to remain in school longer. The extent of this latter trend is indicated on pp. 956-957 of the 1937 Year Book.

3.—Average Daily Attendance in Provincially-Controlled Schools, by Provinces, 1921-37.

NOTE.—Figures for years previous to 1911 will be found at pp. 839-840 of the 1932 Year Book, and those from 1911 to 1920 at p. 963 of the 1937 edition.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921...	11,446	78,238	49,714	401,655	450,656	86,137	113,412	89,401	68,597	1,349,256
1922...	12,338	79,410	51,668	426,466	475,591	95,433	119,041	100,515	75,528	1,435,990
1923...	11,763	83,472	53,745	426,935	482,068	98,787	130,499	103,612	77,752	1,468,633
1924...	11,783	79,509	58,366	430,185	496,673	103,775	139,782	104,003	79,262	1,503,338
1925...	12,259	80,318	58,397	443,741	508,044	104,312	144,650	105,978	82,721	1,540,420
1926...	11,823	80,446	58,731	448,252	512,175	106,809	152,430	108,881	85,293	1,564,840
1927...	11,777	81,426	61,070	452,757	528,485	106,793	157,392	112,401	88,306	1,600,407
1928...	12,123	82,591	62,205	461,228	535,691	114,270	157,207	116,245	91,760	1,633,320
1929...	12,144	84,275	63,312	468,537	583,334	116,766	161,658	120,229	94,410	1,704,665
1930...	12,201	85,080	65,726	478,682	592,265	117,037	169,893	129,371	96,196	1,746,451
1931...	12,721	87,418	70,856	502,890	597,164	120,703	176,716	134,112	99,375	1,801,955
1932...	13,119	89,513	71,423	518,921	606,867	122,843	176,916	136,711	103,510	1,839,823
1933...	13,810	93,866	72,204	525,215	614,357	121,190	175,002	137,558	104,978	1,858,180
1934...	13,399	93,294	72,109	542,355	611,000[1]	120,314	175,457	139,155	103,408	1,870,491[1]
1935...	13,496	90,565	70,757	539,441	609,269	117,379	175,323	136,202	104,824	1,857,256
1936...	13,140	92,279	71,132	539,675	601,758	115,671	164,104	132,725	101,873	1,832,357
1937...	13,313	92,713	71,220	[2]	605,778	117,244	165,465	133,109	104,044	–

[1] Approximate. [2] Not available.

A record of the age distribution of pupils in the provincially-controlled schools of all provinces is presented in Table **4**. The ages of boys and girls are not shown separately, and it should be mentioned that there is a definite tendency for boys to leave school at younger ages than girls. A table at p. 964 of the 1937 Year Book shows, for the years 1911 to 1935, the comparative numbers of boys and girls in the secondary grades of seven provinces.

4.—Age Distribution of Pupils in Provincially-Controlled Schools, by Provinces, 1937.

Age.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
5 years or under	190	1,463	7,706	64,070	13,438	515	1,257	255	139
6 "	1,037	6,785			43,228	7,784	10,587	7,001	4,743
7 "	1,610	9,999	8,832	472,557	59,877	11,512	18,841	14,971	9,887
8 "	1,794	10,874	9,468		60,613	12,441	19,588	15,927	10,093
9 "	1,841	11,040	9,556		62,876	12,603	19,372	15,660	10,347
10 "	1,849	10,829	9,505		62,955	12,928	18,868	15,860	10,301
11 "	1,753	11,208	9,651		64,952	13,077	19,053	15,706	10,668
12 "	1,789	11,244	9,627		66,524	13,719	19,198	16,035	11,163
13 "	1,798	11,019	8,708		63,997	13,942	19,917	15,925	11,373
14 "	1,684	10,375	7,589	73,301	56,974	13,246	19,605	15,505	11,157
15 "	1,391	8,970	5,653		45,984	10,284	17,692	13,461	10,632
16 "	729	6,308	3,699	24,168	29,681	7,243	13,100	9,116	8,289
17 "	338	3,880	2,105		17,811	3,966	8,524	6,302	5,664
18 "	115	1,713	969	4,356	10,090	1,666	4,988	3,428	2,522
19 "	31	652	358		4,889	531	2,575	1,748	923
20 "	6	198	133		1,655	173	1,175	675	264
21 years or over..	8	93	56		1,064	83	939	375	119
Totals, Classified	**17,963**	**116,650**	**93,615**	**638,452**	**666,608**	**135,713**	**215,279**	**167,950**	**118,284**
Unclassified......	183	6	564	Nil	722	6,769	367	Nil	147

Technical Education.—Recent editions of the Year Book have mentioned the tendency in post-War years toward diversity of instruction at the secondary level. It will be of interest to note here the extent to which communities of various sizes have made provision for technical and commercial instruction.

Among the 35 cities in Canada with populations of more than 20,000, there are 9 without day technical schools. Three of these—Verdun, Outremont, and Westmount—are within reach of the Montreal Technical School. The others in order of size are Winnipeg, Halifax, Sherbrooke, Sydney, Glace Bay, and Moncton, the last four being among the smaller cities of the group. Evening technical classes are held in practically the same number of larger cities, though not the same cities, those without them in this case being all in Ontario and Quebec.

Among the 103 cities with populations of between 5,000 and 20,000 about one-fourth have day technical schools and a similar number have evening technical classes. In smaller centres day schools are extremely rare, considering that there are nearly 400 places with populations of between 1,000 and 5,000, and only half a dozen schools among them. A considerable number, however, provide evening instruction of a technical character.

As information is not available concerning the number of centres offering commercial instruction in Quebec, reference can be made to only eight provinces. The chief difference to be noted, in comparison with the coverage of other technical instruction, is that approximately twice as many towns and smaller cities include commercial courses in their high schools. There are privately-owned business schools in quite a number of others, although they, too, are unusual in places with populations smaller than 5,000.

The number of centres offering evening classes of a technical nature has declined very considerably in the past few years, and attendance at such classes has fallen by one-third. Enrolment in day technical schools has changed little for several years (an interesting situation in view of the fact that the academic high school enrolment has continued to increase) probably due to the technical schools being filled to capacity with no money available for their extension.

Over a ten-year period technical students have increased proportionately more than academic students. They have approximately doubled while the others have increased by less than one-half. Even so, in the eight provinces only about one high school student in five is following a technical course.

Technical enrolment includes a number of part-time students in training under provincial apprenticeship Acts, an arrangement that seems to be regarded with favour. Ontario has had an Apprenticeship Act since 1928, under which boys learning the building trades have received their training partly in industry and partly in the technical schools; in 1936 the scope of the Act was extended to include barbering, hairdressing, and the automobile repair trade. A similar plan has been operated in British Columbia in the building trades since 1930, and an Apprenticeship Act was passed by the Nova Scotia Legislature in 1937.

In addition to the arrangements for apprenticeship that are being systematized under provincial statutes, it appears that a growing number of industrial companies are practising plans, of their own arrangement or in conjunction with private correspondence schools, for the technical training of their younger employees. Some of the country's largest railway, mining, and paper companies, as well as other manufacturing establishments, have such plans in operation.

High schools where the only technical course is agricultural are not included in the foregoing references. The total number of schools in Canada that would be called agricultural high schools, in the sense that the term technical high school is used, is less than a dozen, but some of the provinces provide considerable agricultural instruction in the regular courses for school leaving, normal entrance, or matriculation. About one-third of the academic secondary schools in Ontario (collegiate institutes, high and continuation schools) have agricultural classes. The 'ruralization' of teaching in Quebec schools has received emphasis in recent years. Available information, however, does not permit of a tabulation which would convey a reliable impression of the extent of agricultural education in the ordinary schools of the several provinces together.

There are residential agricultural schools (other than agricultural colleges) with one- or two-year courses as follows: two in Alberta, one in Ontario, and two in Quebec. They serve much the same purpose as the diploma courses in agricultural colleges which are held at one centre in each province, except in Quebec where there are three, and in two Maritime Provinces, New Brunswick and Prince Edward Island, where there is none. Such boarding schools for the teaching of agriculture are rare in Canada as compared with some other agricultural countries. Denmark, with a population about equal to Ontario's, has 21 such schools with an attendance of from 2,500 to 3,000, in addition to 59 folk high schools (also residential institutions) with an attendance of 6,500 drawn mainly from farm young people. The total enrolment in agricultural boarding schools in all Canada, including students taking the diploma courses at agricultural colleges as well as the other five schools, is about 800.

For no other occupation, however, with the possible exception of homemaking, do Governments in Canada conduct so many educational services outside of the schools as for agriculture. Short courses for prospectors, established by provincial Mines Departments, have been attended by nearly 5,000 men in a year lately, but short courses for farmers, their wives and children, varying in length from a few days to a few weeks, are attended each year by several times this number. Courses are by no means the only type of educational service sponsored by the Extension Branches of Departments of Agriculture and agricultural colleges. One other variety alone, the organization of boys' and girls' farm clubs, includes more than

30,000 young people. A review of the various types of service is not possible in a short space and will not be attempted here.

Teaching Staffs.—The teaching staffs of day schools under provincial control in Canada consisted in 1937 of 73,291 teachers, 18,424 males and 54,867 females. Practically all of the increase of 3,500 teachers since 1930 has been in the male class. Table 5 summarizes statistics regarding rates of salary for rural and urban teachers in recent years. The "Annual Survey of Education in Canada, 1937" deals in detail with the classification of these teachers, the rates of salary paid, and the teaching experience.

5.—Average Annual Salaries Received by Teachers in Rural and Urban Schools, by Provinces, 1926 and 1931-37.

Item.	1926.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	$	$	$	$	$	$	$	$
Prince Edward Island—								
Rural	508	527	523	507	490	480	481	459
Urban	744	771	771	779	783	770	767	738
Nova Scotia—								
Rural and village	535	556	552	546	531	531	536	535
Urban	887	1,086	1,104	1,071	1,032	1,046	1,077	1,104
New Brunswick—								
Rural	795	640	652	538	452	497	509	483
Urban		1,224	1,233	1,172	1,124	1,166	1,185	1,182
Quebec—[1]								
Roman Catholic Schools—								
Brothers and nuns	423	442	444	432	430	416	417	[2]
Lay teachers	468	538	539	512	481	458	460	[2]
Protestant Schools—								
Lay teachers	1,176	1,305	1,330	1,318	1,265	1,144	1,136	[2]
Ontario—								
Public Schools—								
Rural	987	974	897	764	[3]	744	740	735
Urban	1,458	1,529	1,517	1,438	[3]	1,508	1,471	1,473
Roman Catholic Separate Schools—								
Rural	818	877	849	749	[3]	741	760	740
Urban	687	781	731	743	[3]	739	715	743
Collegiate institutes—urban	2,580	2,716	2,727	2,638	2,449	2,457	2,449	2,439
High schools—urban	2,100	2,243	2,206	2,080	1,831	1,798	1,759	1,749
Continuation schools—urban	1,545	1,570	1,577	1,454	1,272	1,242	1,214	1,213
Vocational schools—urban[4]	2,571	2,572	2,586	2,576	2,413	2,456	2,434	2,428
Manitoba—								
Rural	1,208	951	915	822	529	620	601	612
Urban		1,567	1,423	1,258	1,252	1,258	1,297	1,338
Saskatchewan—								
Rural	1,017[5]	863	861	620	506	465	[2]	484
Urban	1,292[5]	1,289	1,277	1,125	969	914	[2]	1,113
Alberta—								
Rural	1,034[5]	1,018	927	842	738	723	731	752
Urban	1,584[5]	1,533	1,614	1,414	1,418	1,369	1,395	1,415
British Columbia—								
Rural districts	1,110	1,135	1,086	1,011	945	940	949	957
District municipalities	1,419	1,378	1,337	1,104	1,106	1,117	1,135	1,150
Cities	1,648	1,813	1,703	1,297	1,292	1,577	1,600	1,690

---

[1] Not entirely classified as rural and urban. [2] Not available. [3] Changed from calendar to school year. [4] Full-time teacher. [5] 1927 figure.

Financial Statistics.—Table 6 presents records of the finances of the boards operating the provincial schools, in a comparable way, in so far as this can be done with existing records.

6.—Financial Support of Provincially-Controlled Schools in Canada, by Provinces, 1926, 1931, and latest years.

NOTE.—The receipts shown in the following table do not include any amounts raised by loans, or the sale of bonds or debentures, as all revenue of this nature must be repaid ultimately with money raised by local taxation. With the exception of the Maritime Provinces, for which the information is not available, the total debenture indebtedness of the schools of each province is given annually, thus showing the net increase or decrease per year. Figures for 1914 to 1925 will be found at pp. 985-987 of the 1936 Year Book and those for intervening years from 1926 at pp. 967-969 of the 1937 edition and p. 989 of the 1938 edition.

Province and Fiscal Year.	Government Grants.	Taxation within School Administrative Units.	School Board Revenue from Counties.	Total Current Revenue Recorded.[1]	Debenture Indebtedness.	Administrative Units Operating Schools.
	$	$	$	$	$	No.
Prince Edward Island—						
1926	242,336[2]	171,650	Nil	413,986	[3]	469
1931	258,905[2]	189,444	"	448,349		469
1936	265,723[2]	199,172	"	464,895		473
1938	271,934[2]	170,509	"	442,443		475
Nova Scotia—						
1926	365,219[2]	2,393,155	497,229	3,255,603		1,704
1931	509,462[2]	2,657,780	493,533	3,660,775		1,714
1935	631,233[2]	2,604,137	483,185	3,718,555		1,722
1937	663,421[2]	2,590,733	477,265	3,731,419		1,721
1938	688,073[2]	2,650,580	479,063	3,817,716		1,767
New Brunswick—						
1926	511,350[2]	2,263,082	213,066	2,987,498		1,459
1931	459,029[2]	2,467,510	210,500	3,137,039		1,483
1936	462,182[2]	1,964,287	223,493	2,649,962	4,961,800	1,518
1937	505,021[2]	2,077,475	224,451	2,806,947	[3]	1,540
Quebec—						
1926	993,509	15,647,512	Nil	17,271,783	50,413,950	1,800
1931	1,429,033	18,697,183	"	20,742,951	65,886,105	1,827
1935	1,137,886	19,002,389	"	20,735,404	82,919,989	1,859
1937	1,306,691	17,752,626	"	19,754,490	79,275,399	1,867
Ontario—						
1926	4,775,853	30,903,925[4]	1,774,592	37,605,519	71,061,955	6,600 (approx.)
1931	6,276,666	39,544,376[4]	3,100,225	49,351,714	88,781,934	
1935	4,739,116	33,548,155[4]	2,195,651	40,482,922	79,570,591	
1936	4,837,275	35,930,987[4]	2,173,659	38,104,646	76,623,629	
Manitoba—						
1926	1,091,151	7,302,044[4]	Nil	8,393,195	14,790,474	1,862
1931	1,310,587	7,675,879[4]	"	8,986,466	15,006,997	1,938
1937	972,277	6,091,895[4]	"	7,064,172	14,590,064	1,892
1938	1,128,656	7,890,471[4]	"	9,019,127	14,805,883	1,892
Saskatchewan—						
1926	2,265,481	10,696,154	Nil	13,111,829	11,933,064	4,525
1931	2,704,242	8,114,719	"	11,015,486	15,945,934	4,796
1935	1,613,960	6,075,000	"	7,845,354	13,526,765	4,923
1937	1,749,698	5,050,000	"	6,799,678	12,279,162	4,986
Alberta—						
1926	1,137,638	8,241,715	Nil	9,491,130	10,704,634	3,124
1931	1,511,776	8,931,880	"	10,599,204	12,026,157	3,395
1935	1,432,085	7,489,823	"	9,063,248	9,883,239	3,492
1937	1,527,056	7,738,066	"	9,385,328	[3]	3,591
British Columbia—						
1926	2,380,668	5,095,420	Nil	7,476,088	12,101,417	-
1931	2,856,376	6,226,661	"	9,083,037	15,936,753	811
1935	2,175,619	5,623,115	"	7,798,734	14,922,884	762
1937	2,456,372	6,315,902	"	8,772,274	14,127,303	763
1938	2,613,981	6,668,404	"	9,282,385	[3]	741

---

[1] Includes tuition fees where these are recorded. [2] Includes contributions to teachers' salaries in the Maritime Provinces, and, in New Brunswick, grants made to schools by the Vocational Education Board. [3] Record not available. [4] The Ontario figures include the township grant towards the salaries of rural public school teachers. In the rural municipalities of Manitoba about three-fifths of the school support is equalized by a uniform rate levied over the whole municipality.

Subsection 2.—Private Schools.

Private Elementary and Secondary Schools.—There are numerous schools in each province doing work similar to that of the ordinary provincially-controlled schools, but that are not publicly financed or administered and hence are not included in Subsection 1 (except in Quebec). Except in Quebec, the private schools have from about 2 to 4 p.c. of the elementary and secondary pupils in the different provinces. In Quebec the proportion is about 10 p.c., but most of them are subsidized by the Provincial Government and provincial reports include a record of them similar to, and in some cases (as of average daily attendance) inseparable from, the records of publicly-controlled schools. Thus their statistics are of necessity included in Subsection 1. Table 7, however, shows their enrolment quinquennially since 1921, the year in which the Education Branch of the Dominion Bureau of Statistics commenced the collection of reports from private schools. A directory of the schools is included in the "Annual Survey of Education, 1937".

7.—Enrolment in Private Elementary and Secondary Schools in Canada, by Provinces, 1921, 1926, 1931, 1936, and 1937.

NOTE.—Figures for intervening years are given at p. 970 of the 1937 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921	682	3,047	2,607	54,671	9,961	3,149	1,608	2,274	3,159	81,158
1926	580	2,956	3,528	54,767	10,126	4,534	2,358	2,281	4,624	85,754
1931	570	2,746	3,625[1]	57,320	12,214[1]	5,864	2,853	2,944	5,276	93,412[1]
1936	547	3,044	2,784[1]	55,775	11,612[1]	5,131	2,003	3,083	4,568	88,547[1]
1937	597	2,977	2,395	57,031	12,046	5,157	1,931	3,594	4,686	90,414

[1] Revised since the publication of the 1938 Year Book.

Business Colleges.—There are private schools in fields of education other than elementary and secondary, the most numerous group working in the field of business and commercial education. A record of enrolment from this group also has been collected by the Education Branch of the Dominion Bureau of Statistics since 1921; a summary of this information is presented in Table 8.

8.—Enrolment in Private Business and Commercial Schools (Business Colleges) in Canada, by Provinces, 1921, 1926, 1931, 1936, and 1937.

NOTE.—Figures for intervening years are given at p. 971 of the 1937 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total.
1921	85	1,280	740	4,319	14,537	3,538	1,333	2,216	1,986	30,034
1926	114	766	722	2,743	10,314	3,502	1,436	2,739	2,230	24,566
1931	140	775	671	2,807	9,732	3,087	1,400	1,629	2,180	22,421
1936	175	585	366	3,218	6,790	2,773	873	1,527	1,197	17,504
1937	188	720	373	4,133	7,548	3,164	912	1,641	1,853	20,532

Subsection 3.—Higher Education.

Editions of the Year Book previous to 1938 include considerable current information on universities and colleges, concerning enrolment, graduates, teaching staffs, and finances. For example, pp. 971-978 of the 1937 Year Book presents the enrolment and graduates of individual schools of higher education for the year 1934-35 and, furthermore, refers to previous editions of the Year Book in which statistics regarding the finances, staffs, etc., of these institutions are presented. Statistics of this nature may be consulted in the report "Higher Education in Canada 1936-38", published by the Dominion Bureau of Statistics.

There has been an increase of about 50 p.c. in the annual number of university graduates since 1923 or 1924, when the abnormalities of enrolment resulting from the War had practically disappeared. Nearly 3 p.c. of the young people growing up in Canada to-day become university graduates—about 4 p.c. of the young men and 1·5 p.c. of the young women. The proportion receiving degrees in Arts or Science is now nearly double that of fifteen years ago, but in several of the other faculties the proportion has not increased at all, and in some has definitely fallen.

There has been no tendency in post-War years for women to increase their enrolment in such professional lines of study as medicine, dentistry, pharmacy, law, theological, or missionary courses. A few appear in the record of every branch of study into which enrolment can be divided, except forestry, but they have held in the main to Arts, including Science and Commerce, and to Education, Social Service, and Public Health. Altogether they constitute about one-fourth of university graduates, but their proportion of the total has not tended to increase noticeably since the abnormal enrolment of returned soldiers came to an end in the early 1920's. Their proportion is highest in Ontario and the western provinces.

In this connection it is of interest to recall that university education for women in Canada began only within the lifetime of the older generation still living. The centenary of university education for women was celebrated in the United States recently, the original event having been the admission of four young women to the post-matriculation course at Oberlin College, Ohio, in the autumn of 1837, but according to the archives of the Canadian Federation of University Women, it was not until about 40 years later that women were first admitted to a university course in Canada, and only about 50 years ago that the practice became general.

9.—Graduates from Canadian Universities and Colleges, 1930-37.

NOTE.—For figures from 1920-29, see pp. 993-997 of the 1938 Year Book.

Year.	GRADUATES IN ARTS, PURE SCIENCE, AND COMMERCE.							
	Bachelors of Arts.[1]		Bachelors of Science (in Arts).		Bachelors of Commerce.[2]		Totals.	
	Total.	Women.	Total.	Women.	Total.	Women.	Both Sexes.	Women.
1930	2,499	989	237	38	134	17	2,870	1,044
1931	2,474	981	252	45	169	17	2,895	1,043
1932	2,629	1,020	277	41	199	15	3,105	1,076
1933	2,881	1,143	259	35	244	32	3,384	1,210
1934	3,081	1,157	293	45	241	33	3,615	1,235
1935	3,034	1,162	288	39	200	26	3,522	1,227
1936	3,175	1,168	320	45	202	25	3,697	1,238
1937	3,342	1,168	280	28	211	23	3,833	1,219

Year.	GRADUATES IN APPLIED SCIENCE.							
	Bachelors of Applied Science or Engineering.		Bachelors of Architecture.[3]		Bachelors of Forestry.		Totals.	
	Total.	Women.	Total.	Women.	Total.	Women.	Both Sexes.	Women.
1930	384	1	25	Nil	44	Nil	453	1
1931	418	Nil	24	“	41	“	483	Nil
1932	439	1	22	1	32	“	493	2
1933	554	1	32	Nil	27	“	613	1
1934	624	2	31	“	32	“	687	2
1935	642	1	21	2	37	“	700	3
1936	564	2	53	Nil	21	“	638	2
1937	536	1	26	2	17	“	579	3

[1] Includes Bachelors of Letters and of Social Science. [2] Includes Bachelors of Accountancy and of Secretarial Science. [3] Includes diplomas in architecture from the Schools of Fine Arts of Montreal and Quebec.

9.—Graduates from Canadian Universities and Colleges, 1930-37—continued.

Year.	GRADUATES IN AGRICULTURE, VETERINARY SCIENCE, AND HOUSEHOLD SCIENCE.						
	Bachelors of Agricultural Science.		Graduates in Veterinary Science.		Bachelors of Household Science.[1]	Totals.	
	Total.	Women.	Total.	Women.	Women.	Both Sexes.	Women.
1930	131	1	21	Nil	122	274	123
1931	160	2	28	“	112	300	114
1932	150	1	34	“	146	330	147
1933	198	2	37	“	137	372	139
1934	215	2	36	“	164	415	166
1935	243	10	52	“	128	423	138
1936	238	7	53	“	138	429	145
1937	216	3	40	“	162	418	165

Year.	TEACHER DIPLOMAS AND GRADUATES IN EDUCATION AND SOCIAL SERVICE.										
	Teachers Diplomas.	Degrees in Education or Pedagogy.		Librarians Degrees or Diplomas.		Physical Training Diplomas.		Social Service Diplomas.		Totals.	
	Total.	Total.	Women.	Total.	Women.	Total.	Women.	Total.	Women.	Both Sexes.	Women.[1]
1930	523	77	31	36	36	41	41	20	20	697	128
1931	581	60	19	39	37	45	45	18	18	743	119
1932	744	72	21	48	46	41	41	55	51	960	159
1933	807	56	18	53	51	25	25	48	42	989	136
1934	810	74	14	61	58	24	24	36	36	1,005	132
1935	649	61	18	54	53	26	25	48	44	838	140
1936	584	100	25	66	63	21	20	45	39	816	147
1937	517	108	19	43	42	31	29	65	55	764	145

Year.	GRADUATES IN MEDICINE AND RELATED STUDIES.									
	Medical Doctors.		Dentists.		Pharmacists.		Post-Graduate Nurses Diplomas.[2]	Diplomas in Physiotherapy and Occupational Therapy.	Totals.	
	Total.	Women.	Total.	Women.	Total.	Women.	Women.	Women.	Both Sexes.	Women.
1930	518	31	114	1	204	11	111	27	974	181
1931	535	26	90	Nil	208	10	122	20	975	178
1932	511	24	78	“	203	12	159	24	975	219
1933	483	25	70	1	162	10	174	25	914	235
1934	488	18	83	2	160	9	125	1	857	155
1935	472	20	80	1	150	13	150	6	858	190
1936	497	21	106	Nil	190	10	191	27	1,011	249
1937	511	22	113	“	164	14	166	31	985	233

---

[1] Excludes teacher diplomas.

[2] Includes 12 to 24 dental nurses annually.

9.—Graduates from Canadian Universities and Colleges, 1930-37—continued.

Year.	GRADUATES IN LAW AND THEOLOGY.				
	From Law Schools.		From Roman Catholic Theological Colleges.	From Protestant Theological Colleges.	
	Total.	Women.	Total.	Total.	Women.
1930	211	8	269	161	16
1931	223	5	245	189	18
1932	235	8	265	173	15
1933	213	7	258	162	17
1934	209	8	288	202	20
1935	238	11	289	202	15
1936	209	7	310	174	16
1937	236	7	338	183	19

Year.	POST-GRADUATE AND HONORARY DEGREES.							
	Honorary Doctorates.		Doctorates in Course.		Masters of Arts.[1]		Masters of Science.[2]	
	Total.	Women.	Total.	Women.	Total.	Women.	Total.	Women.
1930	127	1	61	7	238	78	68	4
1931	95	Nil	46	7	274	94	93	4
1932	78	2	80	11	239	80	124	5
1933	102	Nil	87	9	287	101	145	7
1934	96	"	89	11	254	87	134	4
1935	76	3	77	4	254	93	115	7
1936	100	2	68	5	252	73	133	3
1937	129	4	78	7	265	70	107	8

Year.	Bachelors of Divinity.	Licentiates (except in Theology).		Other Post-Graduate Degrees and Diplomas.[3]		Totals.	
	Total.	Total.	Women.	Total.	Women.	Both Sexes.	Women.
1930	41	94	1	107	Nil	736	91
1931	37	91	2	100	2	736	109
1932	33	130	2	107	2	791	102
1933	32	97	4	97	Nil	847	121
1934	46	129	16	108	5	856	123
1935	36	112	7	95	3	765	117
1936	43	100	7	90	Nil	786	90
1937	45	121	4	88	8	833	101

Year.	ESTIMATE OF STUDENTS RECEIVING FIRST DEGREES.								
	Grand Totals.[4]			Deductions for Duplication.			Net Totals.		
	Men and Women.	Men.	Women.	Men and Women.	Men.	Women.	Men and Women.	Men.	Women.
1930	5,185	3,839	1,346	467	453	14	4,718	3,386	1,332
1931	5,290	3,952	1,338	449	437	12	4,841	3,515	1,326
1932	5,552	4,109	1,443	459	447	12	5,093	3,662	1,431
1933	5,891	4,307	1,584	440	428	12	5,451	3,879	1,572
1934	6,272	4,687	1,585	479	467	12	5,793	4,220	1,573
1935	6,226	4,648	1,578	460	449	11	5,766	4,199	1,567
1936	6,441	4,834	1,607	455	444	11	5,986	4,390	1,596
1937	6,541	4,926	1,615	505	493	12	6,036	4,433	1,603

---

[1] Includes M. Com. and M. Ed. or M. Pæd. [2] Includes M.A. Sc., M.S.A., M.Sc.F., M. Arch., M.V.Sc., M.Sc. Dent., M. Surgery (where conferred separately). [3] Except diplomas for teachers and theologians. [4] Not including diplomas in Education and Social Service, a few other diplomas, post-graduate and honorary degrees.

Section 2.—Scientific and Industrial Research in Canada.

The field of scientific and industrial research in Canada is covered, so far as the Governments are concerned, by the Dominion and Provincial Departments of Agriculture, Forestry, Fisheries, Mines, etc., together with such special research bodies as the National Research Council, the Ontario Research Foundation, and the Research Council of Alberta. The specific research work carried on by the Dominion Government in these special fields is dealt with in the respective chapter material of this and previous editions of the Year Book, and on pp. 866-872 of the 1932 edition an article outlining the scope of research work generally and in particular the establishment and organization of the National Research Council, the Ontario Research Foundation, and the Research Council of Alberta is given.

The field of private research is, of course, much broader, and data regarding the nature of the work being carried on are more difficult to obtain; it covers all research work conducted at universities, that sponsored by scientific societies and foundations, and the vast field of technical and industrial research conducted by individual industries (which in many cases benefit from their affiliations with parent organizations in the United States or the United Kingdom). A committee, on which all interested Dominion Government departments, the National Research Council, and major industries operating in Canada are represented, is scheduled to meet in Ottawa in late July or August, 1939. A more complete survey of industrial research in Canada than has previously been made will then be possible and a revised article covering the entire subject is planned for the 1940 edition of the Year Book.

Section 3.—Libraries.

The Dominion Bureau of Statistics publishes biennially a Survey of Libraries in Canada. It lists public, university, government, and other special libraries individually, showing the location, size, etc., of each. The latest edition includes information on school and hospital libraries. The following paragraphs are taken from the data in the Survey for 1936-38.

Public Libraries.—Table **10** provides a summary of the public library situation by provinces. The circulation in a year represents about two books per person in the Dominion, but service is confined to 40 p.c. of the population, and they average about five books apiece per year. Except in a few areas the libraries serve only the cities and towns, but, during the 1930's, on both the east and west coasts there have been convincing demonstrations of rural library service, with the assistance of the Carnegie Corporation of New York. The Fraser Valley demonstration has become a permanent regional library, and two other similar libraries have been established in British Columbia. In Prince Edward Island the demonstration included the whole province, and it has become a permanent provincial library system. Interest in it has extended to the adjacent provinces. Nova Scotia, in 1938, established the Regional Libraries Commission which employed a full-time director to assist interested areas of the province in organization. At the same time there have been important independent developments in Ontario. Beginning with Lambton County, seven county library schemes have been developed in the southwestern part of the province. Although, as yet, only 5 p.c. of the Dominion's rural population has library service, the current interest and trend indicates that there may be a considerable increase before long. In cities with populations of more than 10,000 about 92 p.c. of the people have some measure of library service (*i.e.*, a public library within their municipal boundaries), while in smaller urban centres the proportion is 42 p.c.

10.—Summary Statistics of Public Libraries, by Provinces, 1937, with Totals for 1935, 1933, and 1931.

Province.	Volumes.	Circulation.	Registered Borrowers.	Expenditure on Books and Periodicals.	Total Expenditure.
	No.	No.	No.	$	$
Prince Edward Island	44,981	240,641	28,448	5,576	19,558
Nova Scotia	115,068	202,534	19,185	4,435	14,763
New Brunswick	90,988	235,159	25,649	3,779	17,717
Quebec	611,664	672,656	28,700	30,496	185,744
Ontario	3,307,728	12,900,585	668,313	327,648	1,309,141
Manitoba	135,570	813,285	48,687	26,309	81,431
Saskatchewan	218,135	1,095,727	60,353	24,934	100,531
Alberta	246,980	1,417,519	61,911	26,372	112,332
British Columbia	284,306	1,971,569	120,664	52,491	197,508
Yukon	14,712	10,700	277	469	2,761
Totals, 1937	**5,070,132**	**19,560,375**	**1,062,187**	**502,509**	**2,041,486**
1935	**4,848,793**	**21,106,742**	**1,097,247**[1]	**448,251**	[2]
1933	**4,770,981**	**22,376,340**	**1,114,201**	**421,142**	[2]
1931	**4,516,206**	**21,135,354**	[2]	**509,322**	[2]

[1] Revised since previously shown in the 1937 Year Book. [2] Not available.

In the larger centres the libraries are conducted as municipal institutions, usually by a board appointed by the city or town council. Almost 300 are in this category. The more numerous smaller libraries are conducted by voluntary associations. Small provincial grants are given to libraries of both types in most of the provinces, but not in New Brunswick, Quebec, and Manitoba. There is a provincial centre for the direction and encouragement of public library development in the Public Libraries Branch of the Ontario Department of Education, and in the Public Library Commission of British Columbia. This seems to be one of the most effective means of assisting the library movement; public library service has been more complete in Ontario and British Columbia than in other provinces. Prince Edward Island now possesses a centre in the headquarters of its provincial library, and Nova Scotia in its recently-founded Regional Libraries Commission.

Travelling Libraries.—The picture of public library service would not be complete without reference to the travelling libraries. Their object is to supplement the book stock of small public and school libraries and to provide some public library service in communities otherwise without any. Three universities—Acadia, Dalhousie, and St. Francis Xavier—conduct such a service in Nova Scotia, and McGill University circulates libraries in Quebec and the Maritime Provinces. Each of the five most westerly provinces operates a provincial system of travelling libraries with headquarters at the provincial capital. In the Prairie Provinces the provincial service is augmented by libraries sent out by the Saskatoon Public Library and by the Lady Tweedsmuir Libraries. The latter were established in the autumn of 1936 under the personal direction of Her Excellency; in two years some 25,000 books, in packages of from ten to fifty, have been distributed largely in the drought areas.

Open Shelf Libraries.—The loaning of specified books by mail to individual borrowers is offered by most of the centres that conduct travelling libraries. Circulation exceeds 25,000 annually in British Columbia, and 20,000 in Alberta. An effort is being made by provincial library associations and several national educational associations to have reduced postage rates on books circulated in this way.

University, College, and Professional School Libraries.—There were 232 libraries in this group, with 4,314,050 volumes and 531,489 pamphlets; the expenditure on books in 1937 was $259,840. They are primarily for the use of the 65,000 students and 7,000 professors in the institutions.

Business, Technical Society, and Government Libraries.—There were 163 important book collections under this heading with 2,493,991 volumes and 713,124 pamphlets in 1937. The largest libraries are those of the Dominion and Provincial Governments.

Schools of Library Science.—Full-time courses in library science have been offered by McGill University and the University of Toronto for a number of years, and a part-time course by Acadia University. In 1937, a school of library science was established by the University of Montreal and, in 1938, courses were inaugurated by the University of Ottawa. Nearly half of the full-time librarians in all categories of libraries—621 in 1,301—have had some training in library science such as the university centres are giving. Attendance of men, however, is low. Only 15 p.c. of Canadian librarians are men.

Section 4.—Museums.

In 1938, the Education Branch of the Dominion Bureau of Statistics prepared two pamphlets on Canadian museums (including art galleries) based on information received from questionnaires: these were "Assistance to Schools from Museums and Art Galleries" and "Museums in Canada".* The latter includes a directory of all museums found throughout the country, and a brief description of their contents. Table **11** provides some information concerning the more active institutions (*i.e.*, the 37 with full-time staffs), classified according to their chief source of support.

---

* These publications may be obtained on application to the Dominion Statistician. The prices charged are 15 cents per copy for the former and 25 cents for the latter.

11.—Museums, Art Galleries, and Archives in Canada, Reporting Full-Time Staffs, 1937.

Name and Location.	Full-Time Staff.	Floor Space.	Average Daily Attendance.
	No.	sq. ft.	No.
Dominion Government—			
National Gallery of Canada, Ottawa, Ont	16	30,000	200
National Museum of Canada, Ottawa, Ont	[1]	[1]	[1]
Public Archives of Canada, Ottawa, Ont	[1]	[1]	[1]
Fort Anne Historical Museum, Annapolis Royal, N.S	1	4,000	33
Fortress of Louisbourg Museum, Louisbourg, N.S	1	2,024	[1]
Fort Beauséjour National Park Museum, Aulac, N.B	1	880	45
Fort Chambly, Chambly Canton, Que	1	813	[1]
Provincial Governments (including provincial universities and colleges)—			
Provincial Museum of Nova Scotia, Halifax, N.S	2	3,128	32
Public Archives of Nova Scotia, Halifax, N.S	[1]	[1]	[1]
New Brunswick Museum, Saint John, N.B.[2]	12	40,396	66
Musée de la province de Québec, Quebec, Que	18	10,000	195
Musée Laurier, Arthabaska, Quebec, Que	1	[1]	[1]
Le Musée Commercial et Industriel, Montreal, Que	2	15,000	25
Ontario Archives, Toronto, Ont	4	[1]	[1]
Royal Ontario Museum of Archæology, Toronto, Ont.[2]	27	260,000	[3]
Royal Ontario Museum of Geology, Toronto, Ont.[2]	1		
Royal Ontario Museum of Mineralogy, Toronto, Ont.[2]	1		
Royal Ontario Museum of Palæontology, Toronto, Ont.[2]	5		
Royal Ontario Museum of Zoology, Toronto, Ont.[2]	11		
Provincial Museum of Natural History, Regina, Sask	3	6,000	25
University of British Columbia Ethnographical Collection, Vancouver, B.C	1	750	[1]
Provincial Library and Archives, Victoria, B.C	[1]	[1]	[1]
Provincial Museum of Natural History and Ethnology, Victoria, B.C	6	10,000	180

For footnotes see end of table, p. 1026.

11.—Museums, Art Galleries, and Archives in Canada, Reporting Full-Time Staffs, 1937—concluded.

Name and Location.	Full-Time Staff.	Floor Space.	Average Daily Attendance.
	No.	sq. ft.	No.
Universities and Colleges—			
McGill University Museums, Montreal, Que.	[1]	[1]	[1]
Université de Montréal, Herbier de l'Institut Botanique, Montreal, Que.	1	[1]	[1]
Cities—			
Dundurn Castle Museum, Hamilton, Ont.[2]	4	13,500	[1]
Colborne Lodge (Howard House), Toronto, Ont.[2]	1	[1]	40
Vancouver City Museum, Vancouver, B.C.	3	[1]	400
Voluntary Associations or Endowments—			
Art Association of Montreal, Montreal, Que.	[1]	[1]	[1]
Château de Ramezay, Montreal, Que.	2	15,000	200
Art Gallery of Toronto, Toronto, Ont.[2]	37	25,500	372
The Manitoba Museum, Winnipeg, Man.	2	2,600	55
Winnipeg Art Gallery, Winnipeg, Man.	2	6,360	165
Edmonton Museum of Arts, Edmonton, Alta.	1	2,377	30
Vancouver Art Gallery, Vancouver, B.C.[2]	2	7,200	325
Companies—			
Bell Telephone Company of Canada, Montreal, Que.—Telephone Museum and Historical Collection	3	2,000	8
Hudson's Bay Company, Winnipeg, Man.—Historical Exhibit	1	5,000	235

[1] Information not received. [2] An admission fee is charged on certain days. [3] 934 on free days (4 days weekly); 333 on the other 3 days.

Expenditures on the museums with permanent staffs (including archives and art galleries as well as museums in the narrower sense) seem to have been between $800,000 and $900,000 in the year preceding the date of the report. (In a few cases, notably the National Museum, on account of its administration as part of the Bureau of Geology and Topography, it is hardly possible to say accurately how much expenditure should be attributed thereto and, accordingly, only the general proportions of the total figure can be known.) Roughly one-half of the total seems to be provided by the Dominion Government, one-quarter by the Ontario Government, one-tenth by the other eight provinces combined, one-tenth by associations or endowments, and smaller amounts by cities, non-provincial universities, and commercial establishments.

Section 5.—Art in Canada.

An article entitled "The Development of the Fine Arts in Canada", contributed by Newton MacTavish, M.A., D.Litt., appears at pp. 995-1009 of the 1931 Year Book and a shorter article, dealing more particularly with the National Art Gallery, at pp. 886-888 of the 1924 Year Book.

CHAPTER XXVI.—PUBLIC HEALTH AND RELATED INSTITUTIONS.

The subject matter of this chapter is divided into sections dealing with: administration of public health activities in Canada by the Dominion and Provincial Governments; institutional statistics of public health and benevolence where, besides health and hospitalization records, social statistics also receive some attention—the latter are becoming more and more necessary to the proper drafting of social legislation and the study of social problems; the Victorian Order of Nurses; and the Canadian Red Cross Society.

The rapid increase in the numbers committed to various institutions, such as hospitals for the insane, feeble-minded, and epileptic; the alleged increase in juvenile crime and the extension of social work in this field; the increasing number of institutions caring for the aged and incurable, as well as for dependent, neglected, and handicapped children, have been marked features of the first part of the twentieth century.

Section 1.—Administration.

In Canada public health is administered by the Dominion and Provincial Governments through their respective health departments.

The Dominion Government deals only with such public health matters as are exclusively national, or such interprovincial public health matters as cannot be controlled effectively by the provinces. In addition, the Dominion Government makes grants to voluntary organizations that are engaged in public health work, notably: Canadian Welfare Council; Canadian National Institute for the Blind; Canadian Tuberculosis Association; Canadian National Committee for Mental Hygiene; Victorian Order of Nurses; Canadian Branch of St. John Ambulance Association; Canadian Red Cross Society; Health League of Canada; Canadian Mental Hygiene Council.

With the object of obtaining uniform legislation and procedure in the various provinces, the Dominion Council of Health was created in 1919. This body consists of the Deputy Minister of the Dominion Department of Pensions and National Health as Chairman; the chief executive officer of the provincial department or board of health of each province; together with such other persons, not exceeding five, as may be appointed by the Governor in Council to hold office for three years. Of these appointed members, four represent agriculture, labour, and urban and rural women's work, respectively; the fifth member is a scientific adviser on public health matters. The Council meets twice a year at Ottawa, when public health problems are discussed and uniform standards and legislation adopted.

Speaking generally, the administration of local public health activities and the establishment and maintenance of institutions is in the hands of the Provincial Governments, under Sec. 92 of the British North America Act, 1867. Under their control, municipalities, societies, and individuals generally initiate charitable and humane efforts, depending on the Government to some extent for financial aid and for competent uniform inspection of methods and standards. Important, and reflecting most clearly the benefits accruing from such work, are the provisions for medical inspection of school children. These are carried out in some cases by the district or sub-district medical health officers, and in others by public health nurses whose activities are confined to this work alone. In addition, expert advice and assistance are supplied freely to children, teachers, and parents. In many cases dental inspection is provided for. This work is relatively new and has been carried on upon a considerable scale for only a short period; but great benefits have already resulted, notably, in the general improvement in health and sanitary conditions and in the control and prevention of epidemics.

Public hospitals are the most numerous among health institutions. They are usually erected and supported by the municipalities, their actual administration being in the hands of boards of trustees; their revenue, in addition to that provided by the municipality, is derived from grants from the Provincial Governments, donations of individuals and societies, and fees paid by patients. Admission and treatment are free to all deserving persons who apply for them and whose resources are so limited as to prevent their otherwise receiving proper medical attention, while it is generally expected of others that payments for services shall be made in proportion to costs and their ability to defray them. Such public hospitals include isolation and maternity hospitals, tuberculosis sanatoria, etc. The two lazarettos for lepers are under Dominion administration, as are also hospitals for veterans and certain marine and immigrant hospitals.

Private hospitals do not receive public grants. There are also hospitals, more common in the province of Quebec, which are conducted by various religious orders; Red Cross hospitals and outposts; and special hospitals which may be privately administered or maintained by the provinces.

Mental institutions, homes for the feeble-minded and the epileptic are in most cases under provincial administration, although in Nova Scotia the insane of each county are cared for in county institutions.

Among charitable and benevolent institutions, orphanages, refuges, and homes for the aged are usually supported by the larger centres and by county municipalities. Homes or schools for the deaf and dumb, and the blind are largely under provincial administration.

In the case of penal and reformative institutions, penitentiaries are administered by the Dominion Government, while reformatories, industrial schools, prison farms, and similar corrective institutions are administered by the Provincial Governments.

Subsection 1.—Public Health Activities of the Dominion Government.

The Act of Parliament (18-19 Geo. V, c. 39, An Act respecting the Department of Pensions and National Health) creating the Dominion Department of Pensions and National Health, clearly defined its functions. The Department is divided into two divisions—those of Pensions, and National Health. The chief functions of the National Health Section (which from 1919 to 1929 was the Department of Health) are: to protect the country against the entrance of infectious disease; to exclude immigrants who might become a charge upon the country; to treat sick and injured mariners; to see that men employed on public construction work are provided with proper medical care; to set the standards and control the quality of food and drugs, except export meat and canned goods, which are under the Department of Agriculture; to control proprietary medicines and the importation and exportation of habit-forming drugs such as morphine, cocaine, etc.; to care for lepers; to carry out special studies in co-operation with Provincial Departments or Boards of Health and to co-operate with the provinces with a view to preserving and improving the public health. Following are the various Divisions of the Department of Health with outlines of their functions.

Division of Quarantine, Leprosy, Immigration Medical, Sick Mariners and Marine Hospitals.—*Quarantine*—Quarantine has for its object the prevention of the entry into the country by water, land, or air traffic of quarantinable diseases, especially plague, cholera, yellow fever, smallpox, and typhus. Quarantine stations are maintained at Halifax, N.S., Saint John, N.B., Quebec, Que., and William Head, B.C. Supervision is exercised especially over all vessels coming from abroad and any passengers or crews who are found to be suffering from quarantinable disease, together with contacts, are removed to the quarantine station, and the necessary measures taken regarding the infestation of vessels with rats or other vermin; all this in accordance with the principles laid down in the Convention of Paris, 1926. *Leprosy*—The Leprosy Branch of this Division operates two hospitals for the treatment of all cases of leprosy found in Canada, one at Tracadie, N.B., and the other at Bentinck Island, B.C. *Immigration Medical*—Medical advice is given the Immigration Department with regard to the mental and physical suitability of prospective immigrants. With this end in view there has been placed in Great Britain, Ireland, and on the Continent of Europe, a staff of Canadian doctors, who carefully examine all intending emigrants to Canada prior to their embarkation. This arrangement obviates any expense, discomfort, disappointment, and hardship experienced hitherto when it was necessary to deport, on account of physical or mental disability, immigrants who had made the journey across the ocean to Canada. Medical officers are also stationed at the principal ports of entry in Canada, who make a final inspection of prospective immigrants and supply medical care for those who are ill on arrival. *Sick Mariners and Marine Hospitals*—The sick mariners and marine hospitals provide medical and surgical attendance and such other treatment as may be required to all sick and injured mariners arriving at Canadian ports and belonging to vessels that pay sick mariners' dues, in conformity with Part V of the Canada Shipping Act (c. 44, 1934).

Division of Sanitary Engineering.—The activities normally carried on under Public Health Engineering include: the administration of the Public Works Health Act, which is concerned with the health of men on construction works, canals, railways, and other forms of public works; by agreement with the U.S. Public Health Service, investigations and reports on sources of water supplies for use aboard common carriers in international and interprovincial traffic between Canada and the United States; special investigations and reports regarding pollution of the International Boundary waters in conjunction with representatives of the U.S. Public Health Service; supervision of water supplies of common carriers on the inland waters of Canada and in international and interprovincial traffic; co-operation with the Dominion Department of Mines and Resources *re* sanitation in National Parks and summer camps on Dominion lands, and allied matters; co-operation with the American Railway Association regarding regulations on sanitation; co-operation with the Provincial Health Departments and the U.S. Public Health Service for the certification of water supplies of common carriers in interprovincial and international traffic.

Proprietary or Patent Medicine Division.—This Division is organized to give the public a reasonably safe and truthfully labelled proprietary medicine supply. Registration of all secret-formula non-pharmacopœial medicines for human use is required, and control is exercised over the potent drugs used in the manufacture of such medicines and the representations made regarding their use.

Laboratory of Hygiene.—The Laboratory of Hygiene is chiefly concerned with the control of biologic products used in treatment of human diseases, particularly with reference to the potency of certain toxins, antitoxins, and other serological preparations. Sera and vaccines are scrutinized for purity, sterility, and potency. Such drugs as digitalis, strophanthus, ergot, pituitrin, and the salvarsans are examined for potency, and standards for them, based upon those of the League of Nations' Health Committee, are prepared by the Laboratory and furnished to all manufacturers desiring to use them in making their products. The manufacture and sale of vitamins and hormones are controlled. Disinfectants are investigated as to manufacturers' claims for germicidal qualities. Special and general aid is rendered to other departments of government, and research problems are undertaken.

Food and Drugs Division.—In this Division, inspection and laboratory services are maintained primarily for the purposes of the Food and Drugs Act, which is regulatory in character, designed to prevent the importation and sale of adulterated or misbranded food and drugs. Laboratories in Halifax, Montreal, Ottawa, Toronto, Winnipeg, and Vancouver examine samples taken from suspected stocks. Corrective measures are applied whenever adulteration or misbranding is found. Standards of quality have been established for many products, and the supervision of informative, truthful label declarations is a special objective. Laboratory services are provided for other Divisions of the Department, and co-operation with other departments of government is effectively carried on.

Narcotic Drug Division.—Since the introduction of opium smoking in Canada forty or more years ago the use of habit-forming drugs, such as morphine, heroin, and cocaine, has increased. One of the first steps taken by the Department of Health was the creation of a Narcotic Branch. Through this Branch, the importation and sale of such drugs are controlled in accordance with the principles laid down by international Conventions agreed to at The Hague and Geneva. Wholesale agents and druggists are obliged to keep records of importation or sale and to forward their records periodically to the Department. The legitimate use of these habit-forming drugs is thus controlled.

Epidemiology.—The Epidemiological Division co-operates with the provincial Departments of Health in the control of the communicable diseases and carries out special studies in regard to morbidity and mortality of disease and public health problems that arise from time to time.

Industrial Hygiene.—The purpose of the Industrial Hygiene Division is to develop methods for the protection and improvement of the health of industrial workers. This Division conducts special studies regarding illness in industries in co-operation with the provincial Departments of Health.

Child and Maternal Hygiene.—The work of this Division consists of measures designed for the reduction of infantile and maternal mortality in Canada. This necessitates collection of information regarding causative factors and the dissemination of knowledge regarding the application of remedial measures.

Medical Investigation Division.—This Division is concerned with medical examination of civil servants, supervision of sick leave and superannuation of civil servants throughout Canada on behalf of the Civil Service Commission, and special medical studies.

Publicity and Health Education.—As the name indicates, the efforts of this Division are directed towards the dissemination of information on all phases of public health. The work consists of the compilation and distribution of public health literature, of exhibits, lectures, etc.

Subsection 2.—Public Health Activities of the Provincial Governments.*

Prince Edward Island.—The supervision of public health matters in Prince Edward Island was placed, on July 1, 1931, under a specially created Department of Public Health, presided over by a Minister and his Deputy. Two part-time physicians, five full-time public health nurses, and two sanitary and food inspectors are employed. Under the direction of the Deputy Minister, the province is divided into five public health districts and each nurse is assigned a territory in which she is responsible for the inspection of school children, home visits, home-nursing classes, immunizing and vaccinating clinics, etc. The sanitary and food inspectors make regular surveys of the food-manufacturing plants, school premises, hotels, boarding houses, restaurants, etc., throughout the province. The Government also operates the Falconwood Hospital for the Insane and the Provincial Infirmary.

In addition the Government subsidizes the Provincial Sanatorium, which has a capacity of sixty beds and has functioned to capacity since July 1, 1931. In charge of the Provincial Sanatorium is a Medical Superintendent with an assistant and a staff of trained nurses. The Superintendent conducts chest clinics at regular intervals throughout the province as well as a regular weekly clinic in the Sanatorium, where referred cases from physicians are examined.

The Department of Health operates the Provincial Laboratory and a qualified technician is in charge, who examines material forwarded by physicians throughout the province.

Two venereal disease clinics are conducted by the Public Health Department, one in Charlottetown and the other in Summerside. All prisoners in Queens and Prince Counties' gaols are examined and treatment given when required. Other patients unable to attend these clinics on account of distance are treated by their own local physicians who are supplied with the necessary medication.

Nova Scotia.—In Nova Scotia the Department of the Public Health directs its energies to communicable disease control; pre-natal, post-natal, and school hygiene; sewage disposal; safety of milk and water supplies; collection of vital statistics; mental hygiene and health education. All of this has brought into being a comprehensive organization, presided over by a Minister. This acts in an advisory capacity to all local boards of health; makes regulations respecting any matter relevant to the public health; maintains a field force that provides a consulting service in tuberculosis and other health activities; supports a public health nursing service with specially trained nurses, who work both in the schools and in the homes; gives a free public health laboratory service which extends throughout the province; supervises the provincial hospitals, both general and special; provides inspection of public general hospitals and humane institutions; stocks and dispenses sera and vaccines; and distributes literature on all phases of health.

In addition to the foregoing, the Department has recently broadened out and has taken under its ægis certain phases of social welfare and dependency that give it the administration of mothers' allowances, old age pensions, child welfare, and a training school for the mentally deficient.

In reviewing Public Health activities in Nova Scotia during the year 1938, mention should be made of new demands for service that have led to expansion of the older programs and the provision of new ones. A Divisional Medical Health Officer was placed in charge of the Western Health Division of the province. Another Doctor of Medicine was, in September, made Chief of the Bureau of Vital

---

* The material under this heading has been revised by the respective provincial authorities.

Statistics. More public health nurses were attached to the Cape Breton Island Health Unit and it is expected that this particular branch of the organization will soon be brought to full strength.

New Brunswick.—The Department of Health, under the administration of a Minister of Health, was established in 1918. It provides the following services: general sanitation, including supervision of water supplies and sewage disposal; control of communicable diseases, including tuberculosis and venereal diseases; public health laboratory and the supply of biologicals; medical inspection of schools; collection of vital statistics; public health nursing and child welfare; health education; and general supervision and co-ordination of the work of the sub-district boards of health.

Under the Minister, the Department is directed by the Chief Medical Officer who is also Registrar General of Vital Statistics. The staff consists of a director of laboratories, eleven full-time medical health officers, a director of public health nursing service and, in addition, a part-time director of venereal disease clinics.

There are ten health districts, each in charge of a District Medical Health Officer who also provides the tuberculosis diagnostic and medical inspection of schools services.

Sixteen sub-health districts, each with its own board of health of which the District Medical Health Officer is the chairman, have been organized. The sub-district boards of health have their own individual staffs of sanitary, food, plumbing, and other inspectors, registrars of vital statistics and public health nurses, all operating under the Provincial Health Act and Regulations.

The Department also maintains twenty-four depots for the distribution of biologicals and twelve venereal disease clinics.

The twenty-first annual report of the Chief Medical Officer contains a review of the various services, the vital statistics for the province, and the reports of staff members and of the sub-district boards of health.

Quebec.—The Department of Health, under the control of the Minister of Health, replaced the former Provincial Bureau of Health at the end of the year 1936.

The province of Quebec inaugurated, in 1926, a new system known as the 'county health units', consisting of a full-time health service for each county, or group of two or three adjoining counties. At present 42 health units covering 52 counties have been organized with new counties asking for the same privilege. The former district health officers, reduced to 11, are in charge of all the counties not yet organized as county health units.

The services of all these officers and their staffs of nurses, sanitary inspectors, etc., are given in the form of consultations, public lectures, school medical inspections, baby and travelling tuberculosis clinics, and investigations of all kinds, immunization, sanitation, etc.

In addition to an Administrative Division, the Ministry of Health maintains the following divisions: Laboratories, Sanitary Engineering, Demography, Mental Hygiene, Public Charities, Epidemiology, Health Units and Districts, Industrial Hygiene, and Nutrition. The latter includes maternal and child welfare. A new division, the Division of Tuberculosis, is now being established.

The energies of the Ministry of Health are also directed towards the prevention of epidemics, more particularly tuberculosis and the more important causes of infant mortality. To this end, the Ministry has established 21 anti-tuberculosis dispensaries and 70 baby clinics, including those receiving government grants. During the year 1937-38, in the anti-tuberculosis dispensaries and the travelling tuberculosis clinics, 23,712 people were examined. The various county health units have provided for the immunization of 29,413 children against diphtheria, which, with those previously immunized, make a total of 271,919.

Ontario.—The Department of Health of Ontario is under a Minister of the Government. In the direction of the departmental program, he is assisted by a Deputy Minister and a Chief Medical Officer of Health. These activities are appropriately divided into the following divisions: Hospitals, Tuberculosis Prevention, Preventable Diseases, Laboratories, Maternal and Child Hygiene and Public Health Nursing, Oral Hygiene, Sanitary Engineering, Industrial Hygiene, and Inspection of Training Schools for Nurses.

The local health work is carried on by a Board of Health and a Medical Officer of Health in each of the 900 municipalities. Fourteen municipalities have full-time health officers.

The increased public interest in the prevention of tuberculosis has justified the large measure of emphasis placed, during the past three years, on this phase of the program. The Administration pays the maintenance charges of all those suffering from tuberculosis who are medically indigent and who are in need of sanatorium treatment. Diagnostic service is made available to all physicians in respect to tuberculosis through travelling clinics working out from various centres throughout the province.

The Department has continued its efforts to make both diagnosis and treatment of cancer possible for all. Seven cancer clinics are operating in well-chosen centres in the province; each of these is substantially subsidized by the Department.

The Department assumes the responsibility for the free distribution of biological products used in the prevention and cure of preventable diseases. Insulin is distributed to those in need of such treatment on the recommendation of the local authorities; a percentage of the cost is contributed by the local municipalities. An efficient bacteriological service, including the examination and classification of pathological tissue, is offered through the central laboratory and the seven branch laboratories, which are situated at appropriate centres throughout the province. Consultative service in the field of mental hygiene is made available through clinics which operate throughout the province. A regular schedule is maintained by these clinics and the profession is urged to take advantage of the service offered.

The control of venereal diseases is stimulated by the conduct in the large urban centres of clinics operated for the treatment of these diseases. In all municipalities, the Department assumes a percentage of the cost of treatment of those suffering from either syphilis or gonorrhœa, who are not in a position to pay for the necessary treatment.

Manitoba.—Manitoba has an organized Department of Health and Public Welfare. The Health and Public Welfare Act states that the Minister shall preside over and have the management and direction of the Department, and the Department shall have administrative jurisdiction over all matters in the province which relate to health and public welfare. The various Divisions of the Department include those of: Disease Prevention (food and dairy inspection, public health nursing, sanitation, venereal disease prevention, communicable diseases, industrial hygiene, and maternal and child hygiene); Provincial Laboratories; Vital Statistics; Hospitalization; Psychiatry (Selkirk and Brandon Hospitals for Mental Diseases—

Manitoba School for Mentally Defective Persons, Portage la Prairie—Psychopathic Hospital, Winnipeg); Child Welfare; Estates of Insane Persons and Indigency in Unorganized Territory; Supervision of Aged and Infirm Persons (being supported by public funds); Supervision of Medical Service (supplied by the province).

The previously established Board of Health and the Welfare Supervision Board have assumed an advisory capacity to the Minister of Health and Public Welfare; and the Child Welfare Board is both advisory and administrative, being responsible for the administration of the Child Welfare Act as it pertains to Mothers' Allowances.

Saskatchewan.—The Department of Public Health has been organized since 1923 under a Minister and a Deputy Minister. The Public Health Act of Saskatchewan also provides for a Public Health Council, consisting of the Deputy Minister as Chairman, three medical practitioners, a veterinary surgeon, and a civil engineer. This Council acts in an advisory capacity to consider new health regulations and allied problems.

The Department is organized into seven Divisions. The Division of Administration, directly under the Deputy Minister who is also the Registrar General, co-ordinates the activities of the Department as a whole, directs the general policy in public health matters, supervises finances, legislation, hospital grants, municipal boards of health, and medical relief in certain unorganized territories. The Division of Public Health Nursing supervises maternity grants, organizes inspection of school children and home visits, pre-school and preventive clinics in co-operation with local physicians, and conducts a public health nursing service throughout the province. The Division of Communicable Disease deals with epidemiology in all its phases and administers the regulations governing cemeteries and care and transportation of the dead. Supervision of trachoma, venereal disease, and tuberculosis (other than the organization of the Anti-Tuberculosis League) also comes under this Division. The Division of Sanitation supervises food, water, milk, and ice supplies, sewerage systems, urban and rural sanitation, and the organization of union hospital districts. The Division of Laboratories includes in its organization bacteriology, serology, pathology, chemical analyses, and medico-legal work. The Office of the Registrar General (formerly the Division of Vital Statistics) administers the Vital Statistics Act and the Marriage Act. The system used in classifying vital statistics has been decided upon in co-operation with other provinces and the Dominion Bureau of Statistics. The Mental Hygiene Act and the mental institutions established under its provisions in North Battleford, Weyburn, and Regina (psychopathic ward), are administered by the Department, and the internal operations of these institutions are supervised by the Commissioner of Mental Services.

Union Hospitals.—In Saskatchewan, in addition to the general hospitals, there exists a system known as the Union Hospital Organization, designed to furnish hospital accommodation in rural districts. Under the provisions of this plan, two or more municipalities may co-operate in building, equipping, and maintaining a hospital. Municipalities constituting a hospital district may enter into an agreement with the hospital board to provide free treatment for certain classes of patients at the cost of the municipalities concerned.

Cancer Commission.—This Commission, created in 1930, consists of the Deputy Minister of Public Health as Chairman, together with two physicians as members, and a physician as secretary. Consultative diagnostic and treatment clinics have been established in Regina and Saskatoon, and radon is manufactured at an emanation plant in Saskatoon. Close contact is maintained with current advances in the prevention, diagnosis, and treatment of cancer.

Health Services Board.—This Board consists of the Deputy Minister as Chairman, a representative of the provincial College of Physicians and Surgeons, and a representative of the Association of Rural Municipalities. The Board is inquiring into the extent and administration of the various health services existing in the province, collecting and studying data on the general situation regarding incidence of illness from all causes, considering methods for an equitable distribution of the costs of illness, studying the needs of the people with respect to general health services and the necessity of co-ordination of those now existing. An advisory committee is associated with the Board, and consists of representatives from medical, hospital, and allied organizations.

Relief Medical Services Branch.—Since 1931 special grants have been given to physicians and to hospitals in order to allow them to render necessary services to those residents of the drought area unable to pay for such services. At the present time grants are paid to physicians, dentists, and approved hospitals, and arrangements have been made with the Red Cross Society and the Canadian National Institute for the Blind whereby these bodies provide drugs and optical supplies from government funds. The medical officer in charge of the Relief Medical Services Branch, besides administering these grants, also supervises medical and allied services which come under the Bureau of Labour and Public Welfare and the Northern Settlers' Branch of the Department of Municipal Affairs. This arrangement gives these branches of government the advantage of having proper medical advice in the handling of their problems.

Alberta.—The Department of Public Health was established by an Act of the Provincial Legislature in 1919. The Department includes the following Divisions: Communicable Diseases; Sanitary Engineering and Sanitation; Public Health Education; Laboratory; Public Health Nursing; Health Education; Municipal Hospitals; Hospital Inspection; Social Hygiene; Vital Statistics; Mental Hygiene; Dental Hygiene; Tuberculosis Control; Child Welfare and Mother's Allowances. The following institutions are administered by the Department: Central Alberta Sanatorium; the Provincial Mental Hospital, Ponoka; the Provincial Training School, Red Deer; the Provincial Auxiliary Hospital, Claresholm; the Provincial Mental Institute, Edmonton; and the Provincial Auxiliary Hospital, Raymond.

Free clinics for venereal diseases are maintained in the principal cities and in the two provincial gaols. Educational work on social hygiene is carried on by means of lectures, moving pictures, bulletins, and radio talks.

British Columbia.—The Provincial Health Officer, responsible to the Lieutenant-Governor in Council sitting as the Provincial Board of Health, administers the laws relating to Public Health in British Columbia. Five divisions supply specialized services, namely: Tuberculosis Control, Venereal Disease Control, Laboratories, Sanitation, and Vital Statistics. Reorganization of the Division of Venereal Disease Control was completed during 1938. Government clinics for diagnosis and treatment are operated at Vancouver, Victoria, New Westminster, and Trail, while consultative service and free drugs are supplied to the private practitioners throughout the province. Reorganization of the Division of Vital Statistics took place on Apr. 1, 1939, under the supervision of a Director, bringing this phase of Public Health work into line with the other services. The Division of Laboratories has extended its activities so that it supervises all branch laboratories throughout the province, in addition to the central one in Vancouver. The Division of Tuberculosis Control has made further advances, and diagnostic and treatment services are extended to all parts of the province. The Public Health Nursing

Service is being constantly extended to include more rural areas of the province, and particular attention is being given to public health education.

Section 2.—Institutional Statistics.*

Under authority granted by the Dominion Government in 1930, the Dominion Bureau of Statistics has since co-operated with the provincial authorities through the Census of Institutions, and now collects, on a Dominion-wide basis, statistics for the following types of institutions: (1) *hospitals*—institutions primarily engaged in the prevention and cure of physical sickness and disease, such as hospitals for the sick, sanatoria, and institutions for incurables; (2) *mental and neurological institutions*—for the treatment and care of mental ailments, such as asylums for the insane, institutions for the feeble-minded, epileptic, etc.; (3) *charitable and benevolent institutions*—caring for the poor of both sexes and of all ages, such as homes for the aged, county refuges, orphanages, etc.; and (4) *penal and corrective institutions*—having for their purpose the reclamation of the criminal and the reformation and training of delinquent boys and girls. Institutional statistics, as summarized in Table 1, may, therefore, be regarded as dealing with the four main types of social pathology, *viz.*, physical, mental, economic, and moral. They provide a body of statistical data which affords to students of social problems a fairly comprehensive view of institutional life in Canada.

Historical.—A brief historical sketch of the origin and growth of the several classes of institutions in Canada is given at pp. 1006-1009 of the 1936 Year Book.

---

* The statistics of this section have been revised by J. C. Brady, Officer in Charge of Census of Institutions, Dominion Bureau of Statistics.

1.—Numbers of Operating Institutions in Canada, by Provinces, 1937.

Type of Institution.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Canada.
Hospitals											
(excluding mental)—											
Public—											
General	4	23	16	54	110	35	73	77	68	10	470
Women's	Nil	2	1	3	3	Nil	Nil	1	1	Nil	11
Pædiatric	"	1	Nil	3	2	1	1	1	2	"	11
Isolation	"	1	"	4	5	2	1	3	Nil	"	16
Convalescent	"	Nil	"	3	5	1	Nil	Nil	"	"	9
Tuberculosis	1	3	3	8	14	3	3	1	1	"	37
Red Cross	Nil	Nil	Nil	Nil	28	Nil	7	Nil	1	"	36
Incurable	"	"	1	1	7	1	2	5	1	"	18
Other	"	"	Nil	9	1	Nil	3	1	Nil	"	14
Totals, Public	5	30	21	85	175	43	90	89	74	10	622
Private	Nil	6	6	39	54	5	59	43	29	Nil	241
Dominion	"	4	3	4	7	4	1	5	4	"	32
Totals, All Hospitals	**5**	**40**	**30**	**128**	**236**	**52**	**150**	**137**	**107**	**10**	**895**
Mental Institutions—											
Public hospitals	1	1	1	6	11	2	2	3	3	Nil	30
Training schools	Nil	1	Nil	1	1	1	Nil	1	Nil	"	5
Psychiatric hospitals	"	Nil	"	Nil	1	1	"	Nil	"	"	2
County and municipal institutions	"	14	"	"	Nil	Nil	"	"	"	"	14
Dominion hospitals	"	Nil	"	1	1	"	"	"	"	"	2
Private institutions	"	"	"	1	2	"	"	"	1	"	4
Totals, Mental	**1**	**16**	**1**	**9**	**16**	**4**	**2**	**4**	**4**	**Nil**	**57**

1.—Numbers of Operating Institutions in Canada, by Provinces, 1937—concluded.

Type of Institution.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Canada.
Charitable and Benevolent Institutions—											
Homes for adults	1	16	8	33	64	6	Nil	2	7	Nil	137
Homes for adults and children	1	7	10	48	15	3	1	1	2	"	88
Orphanages	2	10	7	39	28	14	4	6	8	"	118
Day nurseries	Nil	1	Nil	3	8	2	Nil	Nil	1	"	15
Children's aid societies	2	14	3	2	58	5	5	3	3	"	95
Juvenile immigration societies	Nil	1	1	1	2	Nil	Nil	Nil	1	"	6
Totals, Charitable, etc.	**6**	**49**	**29**	**126**	**175**	**30**	**10**	**12**	**22**	**Nil**	**459**
Penal and Reformative Institutions—											
Penitentiaries	Nil	Nil	1	1	2	1	1	Nil	1	Nil	7
Corrective and reformative institutions	"	4	3	4	9	3	2	2	2	"	29
Male juveniles	"	*2*	*1*	*2*	*3*	*1*	*1*	*Nil*	*1*	"	*11*
Female juveniles	"	*Nil*	*Nil*	*1*	*1*	*Nil*	*Nil*	*1*	*1*	"	*4*
Male adults	"	"	"	*Nil*	*3*	"	*1*	*Nil*	*Nil*	"	*4*
Female adults	"	"	*1*	"	*1*	"	*Nil*	"	-	"	*2*
Female adults and juveniles	"	*2*	*1*	*1*	*1*	*2*	"	*1*	-	"	*8*
Totals, Penal, etc.	**Nil**	**4**	**4**	**5**	**11**	**4**	**3**	**2**	**3**	**Nil**	**36**
Grand Totals	**12**	**109**	**64**	**268**	**438**	**90**	**165**	**155**	**136**	**10**	**1,447**

Subsection 1.—Statistics of Hospitals, other than Mental.

The total number of various hospitals in operation in Canada during 1937 is given in the first part of Table **1**. It is seen that, in addition to 622 public hospitals, there were 241 private hospitals, and 32 hospitals operated by the Dominion Government. The latter were made up of: 8 for War veterans, 4 quarantine and immigration, 1 marine, and 2 leper hospitals under the direction of the Department of Pensions and National Health; 9 military hospitals under the Department of National Defence; and 8 hospitals for Indians under the Department of Mines and Resources.*

Summary statistics of reporting hospitals, which included 99·7 p.c. of all public and private hospitals in 1937, are presented for the years 1933 to 1937 in Table **2**, and detailed statistics of staff, facilities, and movement of patients are shown by provinces in Table **3**.

---

* A complete list of all hospitals in Canada, giving name, location, type, and bed accommodation for 1937 is issued by the Dominion Bureau of Statistics.

2.—Summary Statistics of Reporting Public and Private Hospitals in Canada, 1933-37.

NOTE.—Figures include hospitals and homes for incurables, but do not include mental hospitals.

Item.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.
Public Hospitals—					
Numbers reporting	598[1]	602[2]	608[1]	610[1]	620[3]
Bed capacities[4]	58,100	58,535	59,832	59,909	63,229
Patients under treatment[5]	657,372	706,240	766,559	825,720	871,339
Total collective days' stay[6]	13,033,921	13,767,188	14,696,408	15,175,356	15,631,343
Private Hospitals—					
Numbers reporting	243	261	267	259	241
Bed capacities[4]	3,312	3,490	3,409	3,386	3,389
Patients under treatment[5]	25,273	30,180	32,363	35,707	36,425
Total collective days' stay[6]	368,221	412,461	410,890	423,239	433,912

[1] Three public hospitals in Yukon and N.W.T. did not report. [2] Seven public hospitals in Yukon and N.W.T. did not report. [3] One hospital in N.W.T. and 1 sanatorium in Quebec did not report. [4] "Bed capacities" includes beds, cribs, and bassinets. [5] "Patients under treatment" includes newborn. [6] "Collective days' stay" includes stay of newborn.

3.—Statistics of Reporting Public and Private Hospitals, by Provinces, showing Staff, Facilities, and Movement of Population, 1937.

NOTE.—Figures include hospitals and homes for incurables, but do not include Dominion or mental hospitals.

Item.	Public Hospitals.		Private Hospitals.	Public Hospitals.		Private Hospitals.
	General.	All Other.		General.	All Other.	
	Prince Edward Island.			Nova Scotia.		
Numbers of hospitals reporting	4	1	Nil	23	7[1]	6
Approved schools of nursing	3	Nil	"	11	2	2
Staff—						
Salaried doctors	1	2	"	8	5	2
Interns	1	1	"	19	6	Nil
Graduate nurses	20	8	"	212	52	47
Student nurses	67	Nil	"	367	55	83
Totals, Personnel	**145**	**33**	"	**1,015**	**308**	**219**
Hospital Facilities—						
X-Ray	4	1	"	22	2	3
Clinical laboratory	3	1	"	15	2	2
Physio-therapy	1	Nil	"	8	2	2
Movement of Population—						
Admissions	5,014	46	"	32,696	3,076	4,888
Live births	445	Nil	"	2,598	917	657
Totals, Under Treatment	**5,598**	**107**	"	**36,303**	**4,543**	**5,672**
Discharges	5,312	33	"	34,166	3,745	5,424
All deaths	184	14	"	1,087	217	134
Total collective days' stay	57,940	21,609	"	410,575	191,661	54,833
	New Brunswick.			Quebec.		
Numbers of hospitals reporting	16	5[1]	6	54	30[1]	39
Approved schools of nursing	12	Nil	Nil	27	9	2
Staff—						
Salaried doctors	9	8	1	135	91	24
Interns	9	Nil	Nil	229	65	Nil
Graduate nurses	158	54	18	1,342	460	120
Student nurses	383	Nil	Nil	1,485	213	24
Totals, Personnel	**932**	**232**	**37**	**7,407**	**2,793**	**391**
Hospital Facilities—						
X-Ray	14	3	3	48	20	20
Clinical laboratory	13	3	1	37	19	16
Physio-therapy	12	2	Nil	36	16	16
Movement of Population—						
Admissions	23,614	576	1,470	134,144	26,613[2]	7,088
Live births	2,012	112	60	8,679	2,366	885
Totals, Under Treatment	**26,411**	**1,126**	**1,558**	**147,933**	**34,215**	**8,236**
Discharges	24,666	578	1,487	136,550	24,789	7,757
All deaths	1,032	80	30	6,132	1,962	214
Total collective days' stay	343,803	165,178	17,024	2,348,027	1,928,828	102,988
	Ontario.			Manitoba.		
Numbers of hospitals reporting	110	65[1]	54	35	8[1]	5
Approved schools of nursing	61	4	Nil	15	3	Nil
Staff—						
Salaried doctors	109	90	21	49	29	1
Interns	209	34	Nil	57	8	Nil
Graduate nurses	1,740	726	145	327	127	10
Student nurses	3,138	144	Nil	759	50	Nil
Totals, Personnel	**9,806**	**3,290**	**410**	**2,035**	**875**	**21**
Hospital Facilities—						
X-Ray	103	29	16	28	6	1
Clinical laboratory	61	15	12	18	6	2
Physio-therapy	50	8	16	8	5	Nil
Movement of Population—						
Admissions	213,132	27,834	8,333	53,856	5,653	811
Live births	25,408	3,425	1,942	7,212	18	231
Totals, Under Treatment	**246,530**	**36,044**	**10,613**	**63,104**	**6,575**	**1,070**
Discharges	227,025	28,847	10,008	59,196	5,410	1,028
All deaths	10,925	1,845	228	1,908	285	19
Total collective days' stay	3,156,707	1,826,099	121,619	713,826	392,249	8,266

---

[1] These institutions are classified in detail in Table 1.

[2] One sanatorium did not report admissions.

3.—Statistics of Reporting Public and Private Hospitals, by Provinces, showing Staff, Facilities, and Movement of Population, 1937—concluded.

Item.	Public Hospitals.		Private Hospitals.	Public Hospitals.		Private Hospitals.
	General.	All Other.		General.	All Other.	
	SASKATCHEWAN.			ALBERTA.		
Numbers of hospitals reporting	73	17[1]	59	77	12[1]	43
Approved schools of nursing	10	Nil	Nil	10	1	Nil
Staff—						
Salaried doctors	13	17	1	22	6	9
Interns	24	Nil	Nil	37	Nil	Nil
Graduate nurses	522	82	44	546	56	37
Student nurses	627	Nil	Nil	714	4	Nil
Totals, Personnel	**2,180**	**437**	**143**	**2,499**	**225**	**133**
Hospital Facilities—						
X-Ray	49	2	3	61	2	5
Clinical laboratory	27	1	5	33	1	3
Physio-therapy	24	1	Nil	17	1	3
Movement of Population—						
Admissions	65,208	2,226	2,949	74,304	1,471	1,435
Live births	7,497	473	817	9,382	374	592
Totals, Under Treatment	**74,578**	**3,671**	**3,851**	**85,961**	**2,539**	**2,082**
Discharges	70,271	2,457	3,674	81,092	1,756	1,991
All deaths	2,387	197	102	2,559	149	43
Total collective days' stay	909,906	373,076	45,496	957,717	224,485	27,201
	BRITISH COLUMBIA.			CANADA.[2]		
Numbers of hospitals reporting	68	6[1]	29	469	151[1]	241
Approved schools of nursing	8	Nil	Nil	157	19	4
Staff—						
Salaried doctors	59	2[3]	9	409	250	68
Interns	50	Nil	Nil	635	114	Nil
Graduate nurses	865	26	64	5,756	1,591	485
Student nurses	782	Nil	Nil	8,322	466	107
Totals, Personnel	**3,473**	**124**	**169**	**29,561**	**8,317**	**1,523**
Hospital Facilities—						
X-Ray	64	2[3]	7	400	67	58
Clinical laboratory	34	1	3	244	49	44
Physio-therapy	21	1	4	179	36	41
Movement of Population—						
Admissions	79,064	1,483	2,955	682,397	68,978	29,929
Live births	8,415	446	245	71,733	8,131	5,429
Totals, Under Treatment	**90,485**	**2,746**	**3,343**	**778,465**	**91,566**	**36,425**
Discharges	84,064	1,636	2,997	723,685	69,251	34,366
All deaths	3,477	219	143	29,787	4,968	913
Total collective days' stay	1,241,052	322,427	56,485	10,186,751	5,445,612	433,912

[1] These institutions are classified in detail in Table 1. [2] Includes 9 general hospitals in Yukon and N.W.T. reporting 1,365 admissions, 85 live births, 1,343 discharges, and 47,198 collective days' stay. [3] Personnel and facilities for Tranquille Sanatorium not available.

Out-Patient Departments.—Out-patient departments are operated in connection with hospitals or other institutions, and treat patients who do not occupy beds in the hospital. The extension of out-patient services to patients of modest means has far-reaching and beneficial effects. It may replace admission to a hospital, or may serve to secure necessary and beneficial hospitalization. As a general rule, out-patient departments are subsidized from the funds of the general hospital and separate records are not kept. Until a uniform system of accounting is adopted, it will not be possible to give the average cost per patient.

Table 4 gives the hospitals of each class operating public out-patient departments in Canada, by provinces, 1937. The statistics are rendered more complicated than is desirable because of lack of uniformity in the method of reporting patients and treatments. The majority of hospitals report both patients and treatments, but a considerable number report either patients or treatments, but not both.

4.—Public Hospitals Reporting Out-Patient Departments, 1937.

Note.—Figures of tuberculosis sanatoria and government and municipal clinics held in hospitals are not included.

Province and Class of Hospital.	Total Out-Patient Departments.	Reporting both Patients and Treatments.			Reporting Patients Only.		Reporting Treatments Only.	
		No.	Patients.	Treatments.	No.	Patients.	No.	Treatments.
Canada	**62**	**34**	**219,084**	**630,174**	**11**	**125,406**	**17**	**920,861**
General	52	31	217,413	627,011	7	95,288	14	801,081
Women's	3	Nil	–	–	2	14,405	1	22,468
Pædiatric	6	2	361	1,066	2	15,713	2	97,312
Other	1	1	1,310	2,097	Nil	–	Nil	–
Nova Scotia	**1**	**Nil**	–	–	**1**	**2,402**	"	–
General	1	"	–	–	1	2,402	"	–
New Brunswick	**2**	**2**	**10,604**	**22,834**	**Nil**	–	"	–
General	2	2	10,604	22,834	"	–	"	–
Quebec	**27**	**16**	**135,053**	**340,113**	**6**	**108,833**	**5**	**269,523**
General	22	14	133,444	337,254	3	80,495	5	269,523
Women's	1	Nil	–	–	1	12,625	Nil	–
Pædiatric	3	1	299	762	2	15,713	"	–
Other	1	1	1,310	2,097	Nil	–	"	–
Ontario	**18**	**10**[1]	**55,030**	**218,321**	**2**	**10,996**	**6**	**461,510**
General	15	10[1]	55,030	218,321	1	9,216	4	359,417
Women's	2	Nil	–	–	1	1,780	1	22,468
Pædiatric	1	"	–	–	Nil	–	1	79,625
Manitoba	**4**	**1**	**12,969**	**40,185**	"	–	**3**	**100,929**
General	3	1	12,969	40,185	"	–	2	83,242
Pædiatric	1	Nil	–	–	"	–	1	17,687
Saskatchewan	**2**	**1**	**555**	**1,360**	**1**	**415**	**Nil**	–
General	2	1	555	1,360	1	415	"	–
Alberta	**3**	**2**	**189**	**443**	**Nil**	–	**1**	**26,538**
General	2	1	127	139	"	–	1	26,538
Pædiatric	1	1	62	304	"	–	Nil	–
British Columbia	**5**	**2**	**4,684**	**6,918**	**1**	**2,760**	**2**	**62,361**
General	5	2	4,684	6,918	1	2,760	2	62,361

[1] Includes one private hospital.

Dominion Government Hospitals.—Hospitals which are operated by the Dominion Government are conducted for special purposes connected with departmental administration such as the care of War veterans or members of the Permanent Force, quarantine of and the care of immigrants or lepers, the care of Indians as wards of the Government, etc.

Of the 32 Dominion hospitals referred to in Table 1, 15 are administered by the Department of Pensions and National Health (8 under the Pensions Section and 7 under the National Health Section); 8 are administered by the Indian Affairs Branch of the Department of Mines and Resources; and 9 are military hospitals under the control of the Department of National Defence.

Table 5 gives main statistics for these hospitals classified by the Departments which control them.

5.—Statistics of Dominion Government Hospitals, by Department under which Administered, Location, etc., fiscal year 1938.

I.—DEPARTMENT OF PENSIONS AND NATIONAL HEALTH

Pensions Section.

Hospital and Location.	Beds.	Strength Apr. 1, 1937.	Admissions.	Transfers In.	Transfers Out.	Discharges.	Deaths.	Strength Mar. 31, 1938.
	MEDICAL TREATMENT.							
Departmental Hospitals—								
Camp Hill, Halifax, N.S....	270	110	759	13	13	784	13	72
Lancaster, Saint John, N.B...	100	46	416	70	69	388	10	65
Ste. Anne's, Ste. Anne de Bellevue, Que............	535	387	306	77	73	341	22	334
Christie Street, Toronto, Ont.	500	278	1,876	68	52	1,859	81	230
Westminster, London, Ont.	615	452	321	150	73	350	16	484
Deer Lodge, Winnipeg, Man.	250	139	891	164	100	928	27	139
Colonel Belcher, Calgary, Alta.....................	150	33	451	7	3	440	11	37
Shaughnessy, Vancouver, B.C......................	200	90	1,204	33	24	1,168	43	92
Totals, Departmental Hospitals, Medical Treatment.	**2,620**	**1,535**	**6,224**	**582**	**407**	**6,258**	**223**	**1,453**
	VETERANS CARE CASES.							
Departmental Hospitals—								
Camp Hill, Halifax, N.S...	-	25	21	Nil	Nil	13	3	30
Lancaster, Saint John, N.B..	-	12	5	5	5	6	2	9
Ste. Anne's, Ste. Anne de Bellevue, Que............	-	77	80	12	10	76	7	76
Christie Street, Toronto, Ont.	-	56	63	Nil	7	25	14	73
Westminster, London, Ont...	-	30	52	9	1	34	4	52
Deer Lodge, Winnipeg, Man.	-	23	31	8	3	9	9	41
Colonel Belcher, Calgary, Alta.....................	-	36	16	1	Nil	11	5	37
Shaughnessy, Vancouver, B.C......................	-	35	52	Nil	"	26	12	49
Totals, Departmental Hospitals, Veterans Care.......	**-**	**294**	**320**	**35**	**26**	**200**	**56**	**367**
Totals, Civil Hospitals, Veterans Care.............	**-**	**5**	**41**	**18**	**27**	**18**	**9**	**10**
Grand Totals, Veterans Care Cases................	**-**	**299**	**361**	**53**	**53**	**218**	**65**	**377**

National Health Section.

Type of Hospital and Location.	Bed Capacity and Staff.						
	Beds.	Salaried Doctors.	Interns.	Graduate Nurses.	Graduate Dieticians.	All Others.	Total Personnel.
Quarantine, Halifax, N.S. (Lawlor's Island)...........	44	1	Nil	Nil	Nil	1	2
Marine, Lunenburg, N.S........	10	1	"	"	"	1	2
Quarantine, Saint John, N.B. (Partridge Island)...........	41	1	"	"	"	2	3
Leper, Tracadie, N.B..........	11	1	"	2	"	2	5
Immigration, Quebec, Que.....	80	3	"	2	"	5	10
Quarantine, Victoria, B.C. (William Head).............	18	2[1]	"	Nil	"	1	3
Leper, Bentinck Island, B.C....	11	Nil[1]	"	1	"	1	2[1]
Totals..............	**215**	**9**	**Nil**	**5**	**Nil**	**13**	**27**

---

[1] Doctors from the Quarantine Hospital, Victoria, care for patients in the Leper Hospital, Bentinck Island.

5.—Statistics of Dominion Government Hospitals, by Department under which Administered, Location, etc., fiscal year 1938—continued.

I.—DEPARTMENT OF PENSIONS AND NATIONAL HEALTH—concluded.

NATIONAL HEALTH SECTION—concluded.

Hospital and Location.	Treatment Activities.						
	Strength Mar. 31, 1937.	Admissions.	Under Care.	Discharges.	Deaths.	Strength, Mar. 31, 1938.	Collective Days' Stay.
Quarantine, Halifax, N.S. (Lawlor's Island)	Nil	6	6	3	1	2	121
Marine, Lunenburg, N.S.	7	70	77	65	Nil	12	1,379
Quarantine, Saint John, N.B. (Partridge Island)	Nil	Nil	Nil	Nil	"	Nil	Nil
Leper, Tracadie, N.B.	7	3	10	"	1	9	2,907
Immigration, Quebec, Que.	Nil	181	181	181	Nil	Nil	1,799
Quarantine, Victoria, B.C. (William Head)	"	4	4	3	1	"	8
Leper, Bentinck Island, B.C.	3	Nil	3	Nil	Nil	3	1,095
Totals	**17**	**264**	**281**	**252**	**3**	**26**	**7,309**

II.—DEPARTMENT OF MINES AND RESOURCES—INDIAN AFFAIRS BRANCH.

Hospital and Location.	Bed Capacity and Staff.					
	Beds and Cribs.	Bassinets.	Salaried Doctors.	Graduate Nurses.	All Others.	Total Personnel.
Lady Willingdon, Ohsweken, Ont.	27	6	2	4	5	11
Norway House, Norway House, Man.	14	4	1	2	4	7
Port Alexander, Indian, Pine Falls, Man.	18	2	1	3	4	8
Fort Qu'Appelle, Indian, Fort Qu'Appelle, Sask.	69	4	1	8	9	18
Peigan Indian, Brocket, Alta.	10	1	1	2	1	4
Blood Indian, Cardston, Alta.	40	Nil	1	8	4	13
Blackfoot Indian, Gleichen, Alta.	44	4	1	6	6	13
Morley, Indian, Morley, Alta.	9	2	1	2	2	5
Totals	**231**	**23**	**9**	**35**	**35**	**79**

Hospital and Location.	Movement of Population.					
	Per Cent of Beds Occupied.	Patients, Beginning of Year.	Admissions.	Live Births.	Still-Births.	Patients Under Care.
Lady Willingdon, Ohsweken, Ont.	85·1	21	399	124	8	544
Norway House, Norway House, Man.	71·4	12	117	10	Nil	139
Port Alexander, Indian, Pine Falls, Man.	23·8	Nil	60	1	1	61
Fort Qu'Appelle, Indian, Fort Qu'Appelle, Sask.	81·1	55	348	34	1	437
Peigan Indian, Brocket, Alta.	52·0	10	211	23	Nil	244
Blood Indian, Cardston, Alta.	62·7	29	1,086	69	1	1,184
Blackfoot Indian, Gleichen, Alta.	57·7	33	581	36	Nil	650
Morley, Indian, Morley, Alta.	66·2	6	148	9	"	163
Totals	**60·5**	**166**	**2,950**	**306**	**11**	**3,422**

5.—Statistics of Dominion Government Hospitals, by Department under which Administered, Location, etc., fiscal year 1938—concluded.

II.—DEPARTMENT OF MINES AND RESOURCES—INDIAN AFFAIRS BRANCH—concluded.

Hospital and Location.	Movement of Population.						
	Dis-charges.	Deaths.	Patients, End of Year.	Collective Days' Stay.		Average Under Care Daily.	Average Days' Stay.
				Newborn	Others.		
Lady Willingdon, Ohsweken, Ont.	511	16	17	1,195	8,371	26·2	17·6
Norway House, Norway House, Man.	126	7	6	148	3,674	10·5	27·5
Port Alexander, Indian, Pine Falls, Man.	48	2	11	11	1,547	4·3	25·5
Fort Qu'Appelle, Indian, Fort Qu'Appelle, Sask.	355	23	59	321	20,454	56·9	47·5
Peigan Indian, Brocket, Alta.	230	8	6	260	1,886	5·9	8·8
Blood Indian, Cardston, Alta.	1,113	25	46	618	9,168	26·8	8·3
Blackfoot Indian, Gleichen, Alta.	610	20	20	306	9,282	26·3	14·7
Morley, Indian, Morley, Alta.	154	5	4	85	1,922	5·5	12·3
Totals	**3,147**	**166**	**169**	**2,944**	**56,304**	**162·3**	**17·3**

III.—DEPARTMENT OF NATIONAL DEFENCE.

Hospital and Location.	Bed Capacity and Staff.				
	Beds.	Salaried Doctors.	Graduate Nurses.	All Others.	Total Personnel.
Halifax Military, Halifax, N.S.	65	4	2	18	24
Military, Quebec, Que.	50	2	1	10	13
Military, St. Johns, Que.	40	1	1	6	8
Station Hospital, Camp Borden, Ont.	40	1	Nil	4	5
Kingston Military, Kingston, Ont.	65	2	2	14	18
London Military, London, Ont.	20	1	1	6	8
Station Hospital, Toronto, Ont.	12	1	Nil	5	6
Fort Osborne Barracks, Tuxedo, Man.	40	2	1	14	17
Station Hospital, Esquimalt, B.C.	20	4	1	10	15
Totals	**352**	**18**	**9**	**87**	**114**

Hospital and Location.	Movement of Population.				
	Per Cent of Beds Occupied.	Patients, Beginning of Year.	Ad-missions.	Patients Under Care.	Discharges.
Halifax Military, Halifax, N.S.	12·7	24	449	473	436
Military, Quebec, Que.	10·8	3	130	133	131
Military, St. Johns, Que.	29·3	7	124	131	126
Station Hospital, Camp Borden, Ont.	35·1	6	388	394	389
Kingston Military, Kingston, Ont.	75·5	35	683	718	696
London Military, London, Ont.	19·5	6	162	168	165
Station Hospital ,Toronto, Ont.	28·3	5	146	151	148
Fort Osborne Barracks, Tuxedo, Man.	28·0	13	409	422	408
Station Hospital, Esquimalt, B.C.	35·1	3	335	338	333
Totals	**28·7**	**102**	**2,826**	**2,928**	**2,832**

Hospital and Location.	Movement of Population.				
	Deaths.	Patients, End of Year.	Collective Days' Stay.	Average Under Care Daily.	Average Days' Stay.
Halifax Military, Halifax, N.S.	6	31	3,042	8·3	6·4
Military, Quebec, Que.	1	1	1,988	5·4	14·9
Military, St. Johns, Que.	Nil	5	1,725	4·7	13·2
Station Hospital, Camp Borden, Ont.	"	5	2,180	6·0	5·5
Kingston Military, Kingston, Ont.	"	22	11,128	30·5	15·5
London Military, London, Ont.	"	3	1,413	3·9	8·4
Station Hospital, Toronto, Ont.	"	3	1,235	3·4	8·2
Fort Osborne Barracks, Tuxedo, Man.	1	13	4,083	11·2	9·7
Station Hospital, Esquimalt, B.C.	Nil	5	2,569	7·0	7·6
Totals	**8**	**88**	**29,363**	**80·4**	**10·6**

Subsection 2.—Statistics of Mental Hospitals.

The Census of Mental Institutions of Canada for June 1, 1931, gave the number of patients in all mental institutions as 31,686, of whom 24,188 were insane, 7,006 mentally deficient, and 492 epileptic. The number of patients in mental institutions per 100,000 of the general population was 305·4 on June 1, 1931, 316·5 on Dec. 31, 1932, 324·9 on Dec. 31, 1933, 335·6 on Dec. 31, 1934, 348·2 on Dec. 31, 1935, and 359·5 on Dec. 31, 1936.

At Dec. 31, 1937, there were 41,677 patients in mental institutions in Canada, and 3,054 on parole, making a total of 44,731, whereas the normal bed capacity was only 37,798, showing a seriously overcrowded situation over a period when the patient population on Jan. 1, 1937, and the admissions and separations during the year are considered. This overcrowded condition is specially marked in British Columbia, Manitoba, Saskatchewan, Ontario, and Quebec. Of the 41,677 resident patients in 1937, 32,678 were insane, 8,159 were mentally deficient, 595 were epileptic, and 245 mental cases were otherwise classified. The patients per 100,000 of population at the end of the year were 373·0. Table **6** gives general statistics of mental institutions for 1937.

6.—Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, 1937.

Item.	Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Institutions reporting..........No.	1	16	1	9	16
Normal capacities.......... “	275	2,166	1,025	11,574	13,303
Staff—					
Doctors, full-time.......... “	3	4	5	51	113
Doctors, part-time.......... “	Nil	16	1	17	30
Graduate nurses.......... “	8	36	20	228	636
Other nurses.......... “	11	71	Nil	399	279
Totals, Staff[1].......... “	**70**	**359**	**188**	**2,451**	**2,863**
Movement of Population—					
Admissions.......... “	91	537	323	3,268	4,354
Totals, under Treatment.......... “	**351**	**2,579**	**1,404**	**16,265**	**19,214**
Separations.......... “	87	436	209	2,835	3,884
Receipts—					
Government and municipal payments.......... $	112,829	552,592	220,398	3,104,238	3,228,612
Fees from paying patients.......... $	9,606	13,370	39,004	423,223	1,276,079
Received from other sources.......... $	478	1,862	115,324	386,648	326,087
Totals, Receipts.......... $	**122,913**	**567,824**	**374,726**	**3,914,109**	**4,830,778**[2]
Expenditures—					
Salaries.......... $	43,533	216,610	91,591	1,274,337	2,594,186
Provisions.......... $	30,859	160,501	88,393	867,300	954,294
All other expenditures for maintenance.......... $	48,520	166,859	129,742	1,175,077	1,124,691
Totals, Expenditures for Maintenance.$	122,913	543,970	309,726	3,316,714	4,673,171
New buildings and improvements.......... $	Nil	20,673	65,000	389,406	76,795
Expenditures for other purposes.......... $	“	1,374	Nil	249,101	16,249
Totals, Expenditures.......... $	**122,913**	**566,017**	**374,726**	**3,955,221**	**4,766,215**[2]

For footnotes, see end of table, p. 1045.

6.—Statistics of Capacity, Staff, Movement of Population, and Finances of Mental Institutions in Canada, by Provinces, 1937—concluded.

Item.		Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Total.
Institutions reporting	No.	4	2	4	4	57
Normal capacities	"	2,282	2,600	2,118	2,455	37,798
Staff—						
Doctors, full time	"	18	11	11	19	235
Doctors, part time	"	4	Nil	Nil	2	70
Graduate nurses	"	52	10	57	37	1,091
Other nurses	"	153	142	57	140	1,252
Totals, Staff[1]	"	**634**	**528**	**449**	**633**	**8,175**
Movement of Population—						
Admissions	"	744	758	744	995	11,814
Totals, under Treatment	"	**3,519**	**3,891**	**3,085**	**4,447**	**54,855**
Separations	"	670	563	631	809	10,124
Receipts—						
Government and municipal payments	$	718,193	1,126,520	895,144	976,082	10,934,608
Fees from paying patients	$	59,875	98,120	68,867	236,910	2,225,054
Received from other sources	$	25,488	6,502	28,671	806	891,866
Totals, Receipts	$	**803,556**[2]	**1,231,142**	**992,682**	**1,213,798**	**14,051,528**[2]
Expenditures—						
Salaries	$	339,435	569,695	446,290	514,080	6,089,757
Provisions	$	192,018	256,937	163,615	290,243	3,004,160
All other expenditures for maintenance	$	258,342	369,117	194,966	398,327	3,865,641
Totals, Expenditures for Maintenance	$	789,795	1,195,749	804,871	1,202,649	12,959,558
New buildings and improvements	$	Nil	35,393	187,811	Nil	775,078
Expenditures for other purposes	$	13,761	Nil	Nil	2,282	282,767
Totals, Expenditures	$	**803,556**[2]	**1,231,142**	**992,682**	**1,204,931**	**14,017,403**[2]

[1] Includes other personnel. [2] Receipts and expenditures for the Toronto Psychiatric Hospital and the Manitoba Psychopathic Hospital are not included.

Subsection 3.—Charitable and Benevolent Institutions.

Statistics of institutions which care for the indigent, the aged and infirm, orphans, dependent and neglected children, the deaf and dumb, and the blind are shown by provinces in Table 7. Such statistics are now collected quinquennially and figures for 1931 will be found at p. 1018 of the 1936 edition of the Year Book.

7.—Summary Statistics of Charitable and Benevolent Institutions in Canada, by Provinces, 1936.

NOTE.—Individual financial statistics are for the accounting years ended nearest to June 1; other figures are as at June 1.

Item.		Prince Edward Island.	Nova Scotia.	New Brunswick.	Quebec.	Ontario.
Institutions[1]	No.	6	48	28	126	173
Personnel	"	58	370	275	4,413	1,675
Inmates—						
Adults	"	187	1,676	532	6,192	5,295
Children	"	233	2,299	993	12,363	13,688
Totals, Inmates	"	**420**	**3,975**	**1,525**	**18,555**	**18,983**
Receipts—						
Grants and maintenance payments	$	9,408	338,815	91,754	1,603,735	2,027,163
Receipts from paying inmates	$	13,954	94,262	40,322	673,269	559,789
All other receipts	$	8,553	131,210	167,558	1,473,447	641,524
Totals, Receipts	$	**31,915**	**564,287**	**299,634**	**3,750,451**	**3,228,476**
Expenditures—						
Salaries and wages	$	9,430	118,471	62,821	625,689	819,892
Provisions (food)	$	8,740	180,179	70,118	1,105,235	801,024
Fuel, power, light, and water	$	4,829	51,390	25,848	456,898	275,163
All other expenditures	$	6,983	226,702	125,611	1,930,506	1,343,502
Totals, Expenditures	$	**29,982**	**576,742**	**284,398**	**4,118,328**	**3,239,581**

[1] These institutions are classified in Table 1.

7.—Summary Statistics of Charitable and Benevolent Institutions in Canada, by Provinces, 1936—concluded.

Item.		Manitoba.	Saskat-chewan.	Alberta.	British Columbia.	Total.
Institutions[1]	No.	30	10	12	21	454[2]
Personnel	"	319	64	71	177	7,422
Inmates—						
Adults	"	336	14	68	381	14,681
Children	"	1,589	327	603	1,318	33,413
Totals, Inmates	"	**1,925**	**341**	**671**	**1,699**	**48,094**
Receipts—						
Grants and maintenance payments	$	276,961	29,752	38,289	268,730	4,684,607
Receipts from paying inmates	$	66,677	5,488	26,671	67,337	1,547,769
All other receipts	$	66,372	42,881	24,881	71,745	2,628,171
Totals, Receipts	$	**410,010**	**78,121**	**89,841**	**407,812**	**8,860,547**
Expenditures—						
Salaries and wages	$	100,361	16,291	19,077	88,864	1,860,896
Provisions (food)	$	77,792	14,356	23,958	52,218	2,333,620
Fuel, power, light, and water	$	46,517	8,840	8,109	23,204	900,798
All other expenditures	$	196,141	35,822	37,484	226,140	4,128,891
Totals, Expenditures	$	**420,811**	**75,309**	**88,628**	**390,426**	**9,224,205**

[1] These institutions are classified in Table **1**. [2] Five institutions did not report and are not included.

Subsection 4.—Corrective and Reformative Institutions.

Summary statistics under this heading collected at the Census of 1931 are given at p. 1019 of the 1936 edition of the Year Book. These statistics are now being collected quinquennially and figures for 1936 are given in Table **8**. The reader will find detailed statistics of crime and delinquency (which are presented on an annual basis), as distinct from these institutional statistics, in Chapter XXVII immediately following this chapter.

8.—Summary Statistics of Corrective and Reformative Institutions, by Provinces, June 1, 1936.

Note.—Statistics for penitentiaries are not included in this table but are to be found in the following chapter. See also headnote to Table **7**.

Item.		Nova Scotia.	New Brunswick.	Quebec.	Ontario.	Manitoba.
Institutions[1]	No.	4	3	4	10	3
Personnel	"	68	40	144	456	58
Inmates—						
Adults (16 years or over)	"	90	49	423	1,806	93
Juveniles (under 16 years)	"	198	54	426	292	47
Totals, Inmates	"	**288**	**103**	**849**	**2,098**	**140**
Receipts—						
Grants—Provincial	$	29,889	17,225	164,032	819,566	64,352
Municipal	$	24,848	16,275	[2]	208,237	[2]
From all other sources	$	26,211	13,755	94,352	614,745	2,639
Totals, Receipts	$	**80,948**	**47,255**	**258,384**	**1,642,548**	**66,991**
Expenditures—						
Salaries	$	27,668	14,127	52,792	455,272	28,341
Provisions (food)	$	15,878	6,193	53,013	232,645	11,999
Fuel, power, and light	$	6,977	3,773	23,572	79,424	15,636
All other expenditures for maintenance	$	17,830	8,430	96,608	257,957	19,641
Totals, Expenditures for Maintenance	$	68,353	32,523	225,985	1,025,298	75,617
Non-maintenance expenditures	$	15,184	10,985	104,927	604,672	3,153
Totals, Expenditures	$	**83,537**	**43,508**	**330,912**	**1,629,970**	**78,770**

[1] These institutions are classified in Table **1**. [2] None reported.

8.—Summary Statistics of Corrective and Reformative Institutions, by Provinces, June 1, 1936—concluded.

Item.		Saskatchewan.	Alberta.	British Columbia.	Total.[1]
Institutions[2]	No.	2	2	2	30
Personnel	"	26	23	39	854
Inmates—					
Adults (16 years or over)	"	54	47	60	2,622
Juveniles (under 16 years)	"	37	17	30	1,101
Totals, Inmates	"	**91**	**64**	**90**	**3,723**
Receipts—					
Grants—Provincial	$	62,513	2,564	54,016	1,214,157
Municipal	$	[3]	842	13,794	263,996
From all other sources	$	98	9,421	4,651	765,872
Totals, Receipts	$	**62,611**	**12,827**	**72,461**	**2,244,025**
Expenditures—					
Salaries	$	34,456	2,504	35,966	651,126
Provisions (food)	$	7,836	4,045	10,613	342,222
Fuel, power, and light	$	5,579	1,914	7,282	144,157
All other expenditures for maintenance	$	14,642	2,918	13,868	431,894
Totals, Expenditures for Maintenance	$	62,513	11,381	67,729	1,569,399
Non-maintenance expenditures	$	[3]	1,029	4,732	744,682
Totals, Expenditures	$	**62,513**	**12,410**	**72,461**	**2,314,081**

[1] There are no institutions of this class in Prince Edward Island. [2] These institutions are classified in Table 1. [3] None reported.

Section 3.—The Victorian Order of Nurses.

The Victorian Order of Nurses, established in 1897, is a National nursing organization having as its object the care of the sick in their own homes on a visit basis regardless of race, creed, or economic status. There are 89 branches of the Order employing approximately 350 public health nurses.

The primary function of the Victorian Order is bedside nursing and teaching of health in the homes visited. Three types of care are given by the nurses, *viz.*, maternal and infant welfare, general nursing, and health education. During 1938, the Order had 350 nurses in the field and 89 Branches distributed as follows: Nova Scotia, 15; New Brunswick, 6; Quebec, 5; Ontario, 49; Manitoba, 1; Saskatchewan, 3; Alberta, 2; and British Columbia, 8. During 1938, 765,969 visits were made to 84,697 patients, which was an increase in the work as a whole. The average number of visits per case was 9·4. Of the total visits made, 59 p.c. were free, while fully-paid visits constituted 25 p.c. (of which 17 p.c. were insurance) and part-paid visits 16 p.c. Maternal and infant welfare cases constituted 62 p.c. of the total visits made.

The maternal death rate per 1,000 living births attended by Victorian Order nurses for the past five years was 2·1.

Section 4.—The Canadian Red Cross Society.*

Closely allied with the Dominion and Provincial Governments in activities to promote the health of the people is the Canadian Red Cross Society. Founded in 1896, its purposes are to furnish volunteer aid to the sick and wounded of armies in time of war, and, in time of peace, to carry on and assist in work for the improvement of health, the prevention of disease, and the mitigation of suffering.

---

* Revised by W. S. Caldwell, M.D., Assistant Director, Ontario Division, The Canadian Red Cross Society, Toronto.

The more important phases of the peace-time work carried on by the Society are: the continuing care of sick and disabled ex-service men; the operation of Red Cross outpost hospitals; the promotion of Junior Red Cross and the treatment of crippled or otherwise disabled children; the maintenance of a disaster relief organization fully prepared for immediate action in any emergency; the organization of classes for the study of home nursing and nutrition; the care of immigrant women and children at the Port of Halifax; the training and supplying of visiting housekeepers for families when the homemaker is ill; co-operation with government departments and other voluntary organizations in the combating of disease, the promotion of child welfare, and the care of the physically defective—in general, provision for the needs of the distressed and destitute.

Since the inception of the peace-time program in 1920, the Red Cross Society has established outpost hospital service in 72 centres in Canada's northland. Twenty-four of these have been handed over to their communities, four have been found no longer necessary, and in 1938 there were 44 outposts operating under the emblem of the Red Cross. In 1938, Red Cross outposts cared for 46,671 patients, of which 8,517 were in-patients, with a total of 90,538 hospital days' treatment. Without the aid of these outposts, thousands of our fellow-citizens who gain their livelihood on the fringes of the settled parts of Canada would lack any kind of skilled assistance in the event of sickness or injury.

Junior Red Cross, a movement for the children of elementary and sometimes secondary schools, is devoted to the promotion of the principles of health, good citizenship, and international friendliness. Guided only by the teacher-mentor, the children work out their own program of personal and school hygiene, community service, and interchange of handicrafts and information with the Juniors of other lands. Though primarily an educational movement, it is significant that, since its inception, the Canadian Junior Red Cross has helped nearly 16,000 crippled or otherwise disabled children. Junior Red Cross now embraces a membership of over 18,000,000 children in 50 nations of the world. At the end of the school year 1937-38, there were 13,090 active Junior Red Cross Branches in Canada, with a total membership of 397,176, and 965 Branches in Newfoundland with 32,800 members. Junior Red Cross in Newfoundland bears practically the same relation to National Office as the nine provincial divisions in Canada.

The consolidated financial statement of the Society for 1938 showed total receipts of $979,360, of which $607,890 consisted of voluntary contributions. Gross expenditures were $1,014,260, of which the major items were $354,436 for outpost hospitals and nursing stations, $161,897 for assistance to soldiers and their dependants, $54,802 for the treatment of crippled children, $102,262 for general and sickness relief, $72,761 for disaster relief, $45,681 for organization of Junior Red Cross, and $25,899 for home nursing, visiting housekeeper, and nutrition services.

CHAPTER XXVII.—JUDICIAL AND PENITENTIARY STATISTICS.*

Canadian Criminal Law and Procedure.—An account of the development of the Criminal Code in Canada is given at pp. 1085-1087 of the 1934-35 edition of the Year Book. In this article a résumé of procedure and of the extent and jurisdiction of the various classes of judges and magistrates is given.

The statistics presented in the tables that follow, which are summarized from the Annual Report of Statistics of Criminal and Other Offences, are collected directly from the criminal courts in the different judicial districts throughout the Dominion. There are 155 judicial districts, including 2 sub-districts, divided as to provinces as follows: Prince Edward Island 3, Nova Scotia 18, New Brunswick 15, Quebec 24, Ontario 47, Manitoba 6, Saskatchewan 21, Alberta 12, British Columbia 8, and Yukon 1. The figures for the Northwest Territories are obtained from the reports of the Royal Canadian Mounted Police.

Section 1.—General Tables.

The collection and publication of criminal statistics now made by the Dominion Bureau of Statistics was initiated in 1876 (39 Vict., c. 13). All records of crime in that period are now available in publications of the Judicial Statistics Branch of the Bureau. The statistics relate to years ended Sept. 30, the latest report being for 1937. Beginning with the report for 1922, an enlargement of the classification of offences has been adopted, by which offences of juvenile offenders are compiled separately from those of adults.

Crime is divided into two definite classes, 'criminal' or 'indictable' offences, which include all serious crime covered by the Criminal Code (see p. 1054), and 'summary' or 'non-indictable' offences, which comprise breaches of municipal by-laws, traffic laws, and other less serious crimes (see p. 1061). Broadly speaking, indictable offences are triable by jury, although in certain cases the accused is accorded the right of election as to whether he be tried by jury or before a judge without the intervention of a jury, and in other cases the jurisdiction of the magistrate as to trial is absolute and does not depend upon the consent of the accused. Non-indictable offences are usually dealt with summarily by police magistrates under the Summary Convictions Act, and comprise breaches of municipal regulations and other minor offences. The term 'indictable' applies to offences of adults only, similar offences committed by juveniles† being termed 'major' offences; similarly, non-indictable offences of adults are termed 'minor' offences when attributed to juveniles.

In 1937, there were 464,180 cases of adult offenders handled by the courts, as compared with 420,247 in 1936. Of this total, 43,968 cases were of an indictable nature, while 420,212 were non-indictable. The corresponding figures for 1936 were 42,541 indictable and 377,706 non-indictable cases. In the case of juvenile offenders, 9,675 young persons were brought before the courts, of whom 1,959 were either dismissed or had their cases adjourned *sine die*.

Convictions for All Offences.—In previous editions of the Year Book, the historical statistics of all offences shown in Table 1 of this chapter have been compiled on the basis of criminal and minor offences. This classification was followed officially prior to 1922 and has been carried on in the Year Book for purposes of comparability. The statistics of Table **1** below, however, have been revised in this edition back to 1886 on the more logical basis of indictable and summary conviction offences. The indictable class of offence does not include many offences which had formerly to be classed as criminal since they were summary convictions of adults that could not be included with minor offences.

---

* Revised by H. M. Boyd, Chief, Judicial Statistics Branch, Dominion Bureau of Statistics. The sixty-second Annual Report of Statistics of Criminal and Other Offences, for the year ended Sept. 30, 1937, is obtainable from the Dominon Bureau of Statistics, price 50 cents.

† The term 'juvenile' is restricted to persons under 16 years of age.

Total convictions in 1937 increased by 44,101, or 10·5 p.c. as compared with 1936. Of the total, 7,716 were cases in which juveniles were found guilty of major or minor delinquency, an increase of 506, or 7·0 p.c. over 1936. The convictions of adults are treated in detail in ss. 2 and 3 under the respective headings "Convictions of Adults for Indictable Offences" and "Summary Convictions of Adults"; those of juveniles are shown in Sec. 3.

In using the statistics in Table **1**, it should be remembered that, while the Criminal Code undergoes little change over periods of time, the figures of summary convictions are influenced very much by the changing customs of the people, and show a strong tendency to increase with the increasing urbanization of the population. From reference to the columns of Table **1** showing percentages of all offences, it is readily seen that summary convictions, as a class, have consistently increased their proportion of all offences, but the most significant column of this table is the figure of indictable offences per 100,000 of population. Attention may be drawn to the increase in the proportion of both indictable offences and summary or non-indictable offences to population in recent years, convictions of indictable offences having risen from 221 per 100,000 population in 1921 to 355 in 1931 and 381 in 1937, and those for non-indictable offences from 1,795 per 100,000 in 1921 to 3,183 in 1931 and 3,801 in 1937.

1.—Convictions for All Offences (Juveniles Included), years ended Sept. 30, 1886-1937, showing Numbers and Percentages of Indictable and Summary (or Non-Indictable) Offences, and Rates per 100,000 Population.

Year.	Indictable Offences.							Summary Offences, Total and Ratios.			Grand Total Convictions.
	Offences against—			Other Indictable Offences.	Total and Ratios of Indictable Offences.						
	The Person.	Property with Violence.	Property without Violence.								
	No.	No.	No.	No.	No.	P.C. of All Offences.	Per 100,000 Population.	No.	P.C. of All Offences.	Per 100,000 Population.	No.
1886...	735	268	2,111	395	3,509	10·3	77	30,365	89·7	663	33,874
1887...	737	227	2,026	263	3,253	9·4	70	31,200	90·6	674	34,453
1888...	817	234	2,371	329	3,751	10·0	80	33,902	90·0	725	37,653
1889...	992	307	2,667	242	4,208	10·9	89	34,223	89·1	724	38,431
1890...	876	288	2,490	280	3,934	10·0	82	34,606	90·0	724	38,540
1891...	905	292	2,552	225	3,974	10·5	82	33,643	89·5	696	37,617
1892...	1,026	262	2,505	247	4,040	11·4	83	31,253	88·6	640	35,293
1893...	1,124	366	2,868	272	4,630	12·9	94	31,023	87·1	629	35,653
1894...	1,163	467	3,326	302	5,258	14·5	106	30,907	85·5	621	36,165
1895...	1,108	483	3,506	377	5,474	14·5	109	32,111	85·5	639	37,585

1.—Convictions for All Offences (Juveniles Included), years ended Sept. 30, 1887-1937, Showing Numbers and Percentages of Indictable and Summary (or Non-Indictable) Offences, and Rates per 100,000 Population—concluded.

Year.	Indictable Offences.							Summary Offences, Total and Ratios.			Grand Total Convictions.
	Offences against—			Other Indictable Offences.	Total and Ratios of Indictable Offences.						
	The Person.	Property with Violence.	Property without Violence.								
	No.	No.	No.	No.	No.	P.C. of All Offences.	Per 100,000 Population.	No.	P.C. of All Offences.	Per 100,000 Population.	No.
1896...	1,099	419	3,381	305	5,204	14·0	103	32,074	86·0	632	37,278
1897...	1,204	489	3,623	405	5,721	15·1	112	32,257	84·9	630	37,978
1898...	1,154	555	3,744	334	5,787	15·1	112	32,419	84·9	627	38,206
1899...	1,168	456	3,743	344	5,711	14·8	109	32,997	85·2	630	38,708
1900...	1,235	431	3,702	400	5,768	13·8	109	35,885	86·2	677	41,653
1901...	1,189	493	3,568	388	5,638	13·4	105	36,510	86·6	679	42,148
1902...	1,329	419	3,541	371	5,660	13·0	103	37,876	87·0	690	43,536
1903...	1,602	562	3,853	504	6,521	12·9	115	43,862	87·1	776	50,383
1904...	1,603	565	4,060	526	6,754	12·3	116	48,192	87·7	827	54,946
1905...	1,609	670	4,316	1,029	7,624	12·2	127	54,935	87·8	915	62,559
1906...	1,618	649	4,651	1,174	8,092	11·4	133	62,811	88·6	1,030	70,903
1907...	1,849	684	5,672	905	9,110	11·5	142	70,060	88·5	1,092	79,170
1908...	2,413	914	6,960	1,048	11,335	12·8	171	77,299	87·2	1,167	88,634
1909...	2,441	852	6,828	1,328	11,449	12·7	168	78,503	87·3	1,154	89,952
1910...	2,632	945	6,994	1,129	11,700	11·4	167	91,203	88·6	1,304	102,903
1911...	2,442	978	8,014	1,193	12,627	11·1	175	100,633	88·9	1,396	113,260
1912...	3,486	1,196	9,346	1,539	15,567	10·6	211	130,960	89·4	1,773	146,527
1913...	4,256	1,478	10,868	1,718	18,320	10·5	240	154,818	89·5	2,028	173,138
1914...	4,428	1,810	13,248	1,952	21,438	11·7	272	161,597	88·3	2,051	183,035
1915...	3,975	2,242	12,882	1,526	20,625	13·4	258	132,430	86·5	1,659	153,055
1916...	3,443	1,484	9,805	4,428	19,160	15·4	239	104,631	84·6	1,308	123,791
1917...	2,526	1,322	8,694	3,017	15,559	13·6	193	98,452	86·4	1,221	114,011
1918...	2,526	2,051	9,851	2,942	17,370	14·1	213	105,899	85·9	1,300	123,269
1919...	2,605	2,608	10,281	2,902	18,396	14·1	222	111,623	85·9	1,343	130,019
1920...	2,901	2,313	10,350	2,879	18,443	11·3	215	144,265	88·7	1,684	162,708
1921...	3,007	2,611	10,735	3,043	19,396	10·9	221	157,777	89·1	1,795	177,173
1922...	2,976	2,783	10,817	3,209	19,785	12·5	222	138,555	87·5	1,554	158,340
1923...	2,753	2,080	10,782	3,738	19,353	12·1	215	139,899	87·9	1,553	159,252
1924...	3,144	2,536	11,891	3,342	20,913	12·5	229	146,103	87·5	1,598	167,016
1925...	3,111	2,728	12,890	3,570	22,299	12·6	240	154,632	87·4	1,664	176,931
1926...	3,588	2,284	13,250	3,416	22,538	11·5	238	172,654	88·5	1,827	195,192
1927...	3,388	2,682	14,315	3,607	23,992	10·8	249	196,269	89·2	2,037	220,261
1928...	3,862	2,991	15,233	4,697	26,783	9·7	272	248,399	90·3	2,526	275,182
1929...	4,238	3,529	16,305	5,131	29,203	9·1	291	292,763	90·9	2,919	321,966
1930...	4,513	4,647	19,617	5,333	34,110	9·9	334	311,531	90·1	3,052	345,641
1931...	4,739	5,288	20,649	6,177	36,853	10·0	355	330,235	90·0	3,183	367,088
1932...	4,323	5,194	19,902	7,060	36,479	10·9	347	300,176	89·1	2,857	336,655
1933...	4,266	5,319	20,693	7,808	38,086	11·4	357	294,982	88·6	2,762	333,068
1934...	3,815	5,310	20,255	7,657	37,037	10·6	342	331,197	89·4	3,060	368,234
1935...	4,233	5,178	20,774	8,860	39,045	9·7	357	364,807	90·3	3,336	403,852
1936...	4,660	5,860	21,174	9,335	41,029	9·7	372	379,946	90·3	3,445	420,975
1937...	5,010	5,826	22,803	8,733	42,372	9·1	381	422,704	90·9	3,801	465,076

The recent trend of total convictions, including those of juveniles, and of sentences imposed is shown by provinces for the years 1931 to 1937 in Table 2. Death sentences have shown a fairly steady decline over the period. Increases in the number of convictions are shown for 1937 in every province, with the exception of Quebec.

2.—Convictions and Sentences for All Offences (Juveniles Included), by Provinces, years ended Sept. 30, 1931-37.

Province and Item.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island—							
Convictions	910	909	737	831	1,017	1,051	1,587
Sentences—							
Penitentiary	6	18	16	16	7	13	10
Gaol or fine	871	853	688	776	913	989	1,453
Reformatory	4	6	4	8	7	9	6
Death	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Other sentences	29	32	29	31	90	40	118
Nova Scotia—							
Convictions	6,725	4,907	5,432	5,651	6,132	7,157	7,844
Sentences—							
Penitentiary	132	152	127	133	123	137	170
Gaol or fine	5,971	4,129	4,474	4,615	5,239	6,078	6,728
Reformatory	45	46	39	79	76	78	80
Death	1	1	3	2	1	Nil	1
Other sentences	576	579	789	822	693	864	865
New Brunswick—							
Convictions	5,380	4,628	4,318	4,400	4,899	5,701	6,834
Sentences—							
Penitentiary	108	92	110	70	68	72	80
Gaol or fine	4,524	4,016	3,519	3,560	3,778	4,769	5,548
Reformatory	40	65	63	58	48	46	63
Death	Nil	Nil	1	1	Nil	2	Nil
Other sentences	708	455	625	711	1,005	812	1,143
Quebec—							
Convictions	106,941	121,191	127,416	125,533	130,337	122,932	109,552
Sentences—							
Penitentiary	765	803	659	683	761	741	545
Gaol or fine	86,729	97,702	108,031	108,885	111,752	96,531	87,250
Reformatory	109	268	280	229	271	293	225
Death	6	6	5	4	7	5	4
Other sentences	19,332	22,412	18,441	15,732	17,546	25,362	21,528
Ontario—							
Convictions	168,069	146,393	140,256	175,083	206,169	221,263	254,886
Sentences—							
Penitentiary	834	775	826	740	869	901	1,143
Gaol or fine	118,674	95,631	94,968	129,695	150,758	175,738	208,524
Reformatory	736	531	261	393	548	2,657	2,622
Death	6	6	10	1	3	6	4
Other sentences	47,819	49,450	44,191	44,254	53,991	41,961	42,593
Manitoba—							
Convictions	27,002	22,343	19,100	20,398	18,649	20,431	31,557
Sentences—							
Penitentiary	528	482	251	243	294	305	320
Gaol or fine	14,737	10,410	7,149	8,546	9,012	11,035	19,308
Reformatory	168	163	123	107	117	100	110
Death	2	4	3	3	1	2	Nil
Other sentences	11,567	11,284	11,574	11,499	9,225	8,989	11,819
Saskatchewan—							
Convictions	13,760	9,687	8,564	8,292	8,007	8,182	10,994
Sentences—							
Penitentiary	115	90	54	58	92	171	180
Gaol or fine	11,822	8,101	7,345	7,124	6,865	6,976	9,569
Reformatory	35	21	22	42	42	36	41
Death	1	3	2	3	2	Nil	1
Other sentences	1,787	1,472	1,141	1,065	1,006	999	1,203
Alberta—							
Convictions	16,589	10,853	12,538	11,077	11,202	12,364	14,947
Sentences—							
Penitentiary	291	187	152	177	194	371	434
Gaol or fine	12,293	8,017	9,672	8,513	8,595	9,512	11,603
Reformatory	15	8	10	9	15	22	17
Death	6	Nil	Nil	2	1	Nil	2
Other sentences	3,984	2,641	2,704	2,376	2,397	2,459	2,891

2.—Convictions and Sentences for All Offences (Juveniles Included), by Provinces, years ended Sept. 30, 1931-37—concluded.

Province and Item.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.
British Columbia—							
Convictions	21,548	15,647	14,602	16,899	17,344	21,793	26,738
Sentences—							
Penitentiary	349	291	290	139	248	192	198
Gaol or fine	18,727	13,185	12,244	14,587	14,015	17,395	22,699
Reformatory	74	48	28	42	86	110	129
Death	3	2	Nil	3	Nil	7	Nil
Other sentences	2,395	2,121	2,040	2,128	2,995	4,089	3,712
The Territories—							
Convictions	164	97	105	70	96	101	137
Sentences—							
Penitentiary	1	2	Nil	1	Nil	2	Nil
Gaol or fine	135	84	87	57	81	94	120
Reformatory	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Death	"	1	"	"	"	"	1
Other sentences	28	10	18	12	15	5	16
Canada—							
Convictions	**367,088**	**336,655**	**333,068**	**368,234**	**403,852**	**420,975**	**465,076**
Sentences—							
Penitentiary	**3,129**	**2,892**	**2,485**	**2,260**	**2,656**	**2,905**	**3,080**
Gaol or fine	**274,483**	**242,128**	**248,177**	**286,358**	**311,008**	**329,117**	**372,802**
Reformatory	**1,226**	**1,156**	**830**	**967**	**1,210**	**3,351**	**3,293**
Death	**25**	**23**	**24**	**19**	**15**	**22**	**13**
Other sentences	**88,225**	**90,456**	**81,552**	**78,630**	**88,963**	**85,580**	**85,888**

Appeals in Criminal Cases.—Statistics of appeals in criminal cases are shown in Table **3** for the calendar year 1937. Comparable statistics for previous years are not available.

3.—Appeals in Criminal Cases, calendar year 1937.

Province.	Appeals Disposed of by Courts.	Disposal.			
		Convictions Quashed.	Dismissed.	Varied.	New Trial Directed.
Prince Edward Island	Nil	-	-	-	-
Nova Scotia	12	2	7	2	1
New Brunswick	6	1	4	1	Nil
Quebec	66	9	51	5	1
Ontario	101	17	56	22	6
Manitoba	33	5	18	9	1
Saskatchewan	21	2	8	8	3
Alberta	106	42	47	11	6
British Columbia	77	5	60	9	3
Yukon and Northwest Territories	Nil	-	-	-	-
Supreme Court of Canada	6	2	4	Nil	Nil
Totals	**428**	**85**	**255**	**67**	**21**

Pardons.—The total number of cases in which the prerogative of mercy was exercised during 1937 was 1,272; of these 66 were not imprisoned, and were granted remittance or reduction of fines, etc. Of those imprisoned 588 cases were released on ticket of leave, and 668 were released unconditionally, 37 were deported, 67 fines were remitted or reduced; 4 death sentences were commuted and 53 cases disposed of in various other manners. These figures relate to the judicial year ended Sept. 30, and are not therefore comparable with those given in Sec. 5, Penitentiary Statistics.

Section 2.—Offences of Adults.

Statistics of the total numbers of convictions registered for offences committed by adults (persons 16 years of age or over) are shown in Table **4**, for the years 1933-37. The statistics in this table are comparable with those shown for juvenile offenders in Table **18**. The separation between adult and juvenile offenders is only available for the years beginning with 1922, but totals of adult offences for the years 1922-32 may be obtained by subtracting those of Table **18** from those of Table **1**.

4.—Convictions for Indictable and Summary Offences, by Class of Offence, Compared as to Numbers and Ratios, years ended Sept. 30, 1933-37.

Class of Offence.	NUMBERS.				
	1933.	1934.	1935.	1936.	1937.
Indictable Offences—					
Offences against the person	4,019	3,588	3,985	4,457	4,824
Offences against property with violence	4,347	4,238	4,147	4,841	4,604
Offences against property without violence	16,868	16,337	16,600	17,514	19,085
Other indictable offences	7,708	7,521	8,799	9,247	8,635
Totals, Indictable Offences	32,942	31,684	33,531	36,059	37,148
Summary Offences—					
Gambling Acts	22,191	30,699	25,889	40,670	14,360
Liquor Acts	10,489	10,754	8,826	10,073	11,142
Traffic Regulations	186,848	217,827	246,123	237,183	288,688
Vagrancy and loose, idle, and disorderly conduct	13,467	11,211	13,610	14,595	16,453
Drunkenness	18,910	20,764	25,643	28,433	34,606
Frequenting bawdy houses	3,980	2,618	2,674	2,725	3,598
Other summary offences	36,788	34,871	39,877	44,027	51,365
Totals, Summary Offences	292,673	328,744	362,642	377,706	420,212
Grand Totals	**325,615**	**360,428**	**396,173**	**413,765**	**457,360**

Class of Offence.	RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.									
	1933.		1934.		1935.		1936.		1937.	
	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.
Indictable Offences—										
Offences against the person	1·2	38	1·0	33	1·0	37	1·1	41	1·0	44
Offences against property with violence	1·3	41	1·2	39	1·1	38	1·2	44	1·0	41
Offences against property without violence	5·2	157	4·5	152	4·2	152	4·2	158	4·1	171
Other indictable offences	2·4	72	2·1	69	2·2	80	2·2	84	2·0	78
Totals, Indictable Offences	10·1	308	8·8	293	8·5	307	8·7	327	8·1	334
Summary Offences—										
Gambling Acts	6·8	208	8·5	283	6·5	237	9·8	369	3·2	129
Liquor Acts	3·2	98	3·0	99	2·2	81	2·4	91	2·4	100
Traffic Regulations	57·3	1,749	60·4	2,010	62·2	2,251	57·4	2,151	63·1	2,596
Vagrancy and loose, idle, and disorderly conduct	4·1	126	3·1	104	3·4	124	3·5	132	3·6	148
Drunkenness	5·7	177	5·8	192	6·4	235	6·9	258	7·6	311
Frequenting bawdy houses	1·2	37	0·7	24	0·7	24	0·7	25	0·8	32
Other summary Offences	11·6	345	9·7	322	10·1	364	10·6	399	11·2	463
Totals, Summary Offences	89·9	2,740	91·2	3,034	91·5	3,316	91·3	3,425	91·9	3,779
Grand Totals	**100·0**	**3,048**	**100·0**	**3,327**	**100·0**	**3,623**	**100·0**	**3,752**	**100·0**	**4,113**

Subsection 1.—Convictions of Adults for Indictable Offences.

The progress of a community, from a moral point of view, is often judged by the number of convictions for indictable offences, as these are less affected than non-indictable offences by extraneous circumstances and the varying methods of law enforcement in different areas and in different years. However, in the study of such statistics it is important to have comparable figures over a period of years, and these are set out by provinces for each year since 1911 in Table **5**. Again, in Table 7 are shown the numbers of charges and convictions and the percentages of acquittals for the three years ended Sept. 30, 1935-37.

It may be stated that during the thirty-eight year-period from 1900 to 1937 crimes increased from 5,768 to 37,148 or 544 p.c. The increase in the population during the same period was but 109·7 p.c., revealing that the increase in the crime rate was five times that of the population.

5.—Convictions of Persons 16 Years of Age or Over for Indictable Offences, by Provinces, years ended Sept. 30, 1911-37.

NOTE.—For figures for 1900-10, see p. 1016 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911	19	356	123	1,865	5,067	888	957	870	1,015	24	4	11,188
1912	11	657	107	2,052	5,456	1,121	1,204	1,513	1,532	26	7	13,686
1913	8	598	140	2,336	6,272	1,331	1,594	1,908	1,794	26	[1]	16,007
1914	18	669	179	2,918	7,479	1,284	1,889	2,235	2,112	27		18,810
1915	12	840	206	2,427	7,112	1,362	1,993	2,082	1,517	24		17,575
1916	11	519	241	3,166	6,023	914	1,711	1,895	1,503	20		16,003
1917	21	427	228	2,667	4,824	755	1,057	894	1,058	22		11,953
1918	12	563	230	2,916	6,111	811	1,067	886	659	11		13,266
1919	14	663	241	2,960	6,605	919	1,134	1,028	951	5		14,520
1920	4	580	375	2,517	6,707	987	1,467	1,233	1,212	6		15,088
1921	15	712	313	2,654	7,548	1,159	1,220	1,263	1,282	3		16,169
1922	27	701	322	2,885	7,021	1,188	1,391	1,171	1,004	10		15,720
1923	13	400	148	2,655	6,886	1,094	1,446	1,424	1,116	6		15,188
1924	25	595	224	2,729	7,180	1,160	1,647	1,423	1,265	10		16,258
1925	3	624	244	3,084	7,751	1,215	1,654	1,254	1,385	2	3	17,219
1926	14	752	222	3,053	7,248	1,383	2,052	1,463	1,252	3	6	17,448
1927	14	680	287	3,621	7,962	1,457	1,492	1,483	1,833	3	4	18,836
1928	43	891	365	4,299	9,052	1,672	1,761	1,701	1,931	5	Nil	21,720
1929	55	869	358	4,780	9,489	1,988	1,918	2,201	2,425	8	6	24,097
1930	59	875	354	5,540	11,774	2,272	2,355	2,525	2,694	6	3	28,457
1931	57	1,184	461	5,737	12,000	3,102	2,716	2,887	3,385	8	5	31,542
1932	78	1,072	514	7,086	12,428	2,982	1,893	2,241	3,072	6	11	31,383
1933	70	1,160	479	7,713	13,152	2,667	2,049	2,544	3,094	7	7	32,942
1934	88	992	525	7,687	11,761	2,571	2,396	2,708	2,946	3	7	31,684
1935	59	1,002	576	9,354	12,653	2,382	1,976	2,424	3,088	3	14	33,531
1936	75	1,147	744	9,497	13,594	2,631	2,194	3,138	3,021	8	10	36,059
1937	98	1,081	759	7,781	14,569	2,839	3,083	3,589	3,331	8	10	37,148

[1] Included with Manitoba since that part of the N.W.T. from which earlier returns were received was included in Manitoba by the Extension of Boundaries Act, 1912. Later figures are for the present area of the N.W.T.

Multiple Convictions.—The total number of convictions must not be confused with the total number of persons convicted in any one year since an increasing number of persons tried for indictable offences have been convicted for more than one offence at the same trial. The trend of such 'multiple convictions' is interesting to students of sociology, and the following table has been compiled to show this for the five-year period 1933-37.

6.—Numbers of Persons Convicted of More than One Crime at the Time of Trial Compared with the Numbers Convicted of One Crime, years ended Sept. 30, 1933-37.

Persons Convicted of—	1933.	1934.	1935.	1936.	1937.
2 offences	1,254	1,281	1,507	2,179	2,177
3 "	419	412	406	505	528
4 "	171	211	214	272	296
5 "	111	132	110	146	122
6 "	56	76	76	89	73
7 "	44	63	37	42	77
8 "	29	32	40	23	44
9 "	16	20	16	24	28
10 "	20	14	17	19	15
11 to 20 offences	40	53	61	51	61
21 offences or over	4	4	12	21	18
Totals, Convicted of more than one crime	2,164	2,298	2.496	3,371	3,439
Totals, Convicted of one crime	25,925	24,076	25,374	25,692	26,296
Grand Totals	**28,089**	**26,374**	**27,870**	**29,063**	**29,735**

In Table 7, which shows charges, convictions and acquittals by provinces, convictions for indictable offences show increases in Prince Edward Island, New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. Nova Scotia and Quebec show decreases from the previous year's totals while the Territories remain the same.

7.—Charges, Convictions, and Percentages of Acquittals for Indictable Offences, by Provinces, years ended Sept. 30, 1935-37.

Note.—The figures of this table do not include charges or convictions of juvenile delinquents.

Province.	Numbers.						Percentages of Acquittals.		
	1935.		1936.		1937.		1935.	1936.	1937.
	Charges.	Convictions.	Charges.	Convictions.	Charges.	Convictions.			
Prince Edward Island	69	59	83	75	122	98	14·5	9·6	19·7
Nova Scotia	1,224	1,002	1,389	1,147	1,214	1,081	18·1	17·4	11·0
New Brunswick	619	576	806	744	826	759	7·0	7·7	8·1
Quebec	10,658	9,354	10,626	9,497	8,879	7,781	12·2	10·6	12·4
Ontario	15,717	12,653	16,639	13,594	17,896	14,569	19·5	18·3	18·6
Manitoba	2,781	2,382	3,106	2,631	3,428	2,839	14·4	15·3	17·2
Saskatchewan	2,189	1,976	2,491	2,194	3,445	3,083	9·7	11·9	10·5
Alberta	2,680	2,424	3,880	3,138	4,361	3,589	9·6	19·1	17·7
British Columbia	3,549	3,088	3,501	3,021	3,774	3,331	12·9	13·7	11·7
The Territories	20	17	20	18	23	18	15·0	10·0	21·7
Canada	**39,506**	**33,531**	**42,541**	**36,059**	**43,968**	**37,148**	**15·1**	**15·2**	**15·5**

Classes of Indictable Offences and Analyses of Convictions.—Indictable offences are divided under the Canadian system into six main classes, as shown in Table 8. The increase in total convictions from 36,059 in 1936 to 37,148 in 1937, *viz.*, 1,089, is accounted for by increases in Classes I, III, IV, and V; these more than nullify decreases in Classes II and VI.

Class I (Offences against the Person) shows an increase of 367, or 8·23 p.c., in 1937 over 1936. In this class, abduction, aggravated assault, assault on wife and females, assault on and obstructing police, bigamy, blackmail, carnal knowledge, concealment of birth, endangering life on railway, non-support, procuration, rape, and shooting and wounding show increases in 1937 as compared with 1936.

In Class II (Offences against Property with Violence) 237, or 4·89 p.c., fewer convictions were made in 1937 than in 1936, although an increase is shown in the number of convictions for robbery.

For Class III (Offences against Property without Violence) there is an increase of 1,472 convictions, or 8·65 p.c., in 1937 compared with the 1936 figure. Convictions for bringing stolen goods into Canada, embezzlement, false pretences, receiving stolen goods, fraud, theft, and theft of automobile were more numerous in 1937 than in 1936. Horse and cattle stealing, and theft of mail show fewer convictions in 1937 than in the preceding year.

In Class IV (Malicious Offences against Property), an increase of 99 convictions, or 20·12 p.c., is shown for 1937 as compared with 1936.

Convictions for offences in Class V (Forgery and Other Offences against the Currency) increased from 1,094 in 1936 to 1,242 in 1937. The 148 increase represents 13·53 p.c. Both crimes in this category, forgery and offences against currency, increased during 1937.

Class VI (Other Offences), including crime not classified in the preceding five classes, shows 760, or 9·32 p.c., fewer convictions in 1937 than in the preceding year. Criminal negligence, illicit stills, keepers and inmates of bawdy houses, offences against public morals, offences against the Opium and Narcotic Drug Act, perjury, and breach of revenue laws show increases during 1937 but there are decreases in convictions for attempted suicide, carrying unlawful weapons, conspiracy, gambling and lotteries, intimidation, prison breach and escape, riot and unlawful assembly, sodomy, breaches of the Trade Mark Act, and miscellaneous.

Details are given in Tables 8 to **11**.

8.—Indictable Offences, by Classes, years ended Sept. 30, 1935-37.

NOTE.—The figures of this table do not include charges or convictions of juvenile delinquents.

Class and Offence.	1935.		1936.		1937.	
	Charges.	Convictions.	Charges.	Convictions	Charges.	Convictions.
Class I.—Offences against the Person.	No.	No.	No.	No.	No.	No.
Abduction	21	13	40	17	27	18
Abortion and attempt	39	26	49	27	43	26
Assault, aggravated	1,376	940	1,476	929	1,408	965
Assault, common	1,622	1,212	2,044	1,577	1,920	1,475
Assault on females	171	129	131	93	143	101
Assault on wife	207	173	196	157	241	189
Assault, indecent	274	195	306	195	285	184
Assault on and obstructing police	592	515	714	647	1,070	963
Bigamy	56	47	46	40	71	56
Blackmail	25	16	30	19	26	22
Carnal knowledge	177	108	192	128	187	141
Cause injury by fast driving	32	19	45	28	51	24
Concealment of birth	13	11	8	6	16	15
Desertion and cruelty to children	17	11	16	13	6	2
Endangering life on railway	20	20	17	15	32	30
Incest	74	59	90	75	56	43
Libel	17	10	13	9	11	7
Manslaughter	135	41	126	59	148	44
Murder	46	15	47	22	35	13
Murder, attempt to commit	21	13	37	25	17	12
Non-support of family	285	157	319	194	404	304
Procuration	77	63	54	37	71	43
Rape	26	14	24	9	33	14
Rape, attempt to commit	12	8	12	12	8	7
Seduction	57	30	47	24	38	21
Shooting and wounding	146	113	144	90	153	99
Wife desertion	8	7	14	10	8	6
Other offences against the person	28	20	1	-	-	-
Totals, Class I	**5,574**	**3,985**	**6,238**	**4,457**	**6,508**	**4,824**

8.—Indictable Offences, by Classes, years ended Sept. 30, 1935-37—concluded.

Class and Offence.	1935.		1936.		1937.	
	Charges.	Convictions.	Charges.	Convictions.	Charges.	Convictions.
	No.	No.	No.	No.	No.	No.
Class II.—Offences against Property with Violence.						
Burglary, house-, warehouse-, and shop-breaking	4,158	3,720	4,982	4,487	4,690	4,215
Robbery and demanding with menaces	527	427	454	354	496	389
Totals, Class II	**4,685**	**4,147**	**5,436**	**4,841**	**5,186**	**4,604**
Class III.—Offences against Property without Violence.						
Bringing stolen goods into Canada	8	8	3	3	6	6
Embezzlement	178	124	180	120	261	190
False pretences	2,972	2,471	3,041	2,618	3,423	2,930
Feloniously receiving stolen goods	1,857	1,437	2,258	1,742	2,375	1,762
Fraud and conspiracy to defraud	627	512	485	395	499	403
Horse, cattle, and sheep stealing	175	138	217	181	180	145
Theft	12,175	10,603	12,791	11,026	13,838	11,905
Theft of mail	30	28	44	43	31	18
Theft of automobile	967	840	1,051	894	1,249	1,135
Totals, Class III	**18,989**	**16,161**	**20,070**	**17,022**	**21,862**	**18,494**
Class IV.—Malicious Offences against Property.						
Arson	79	55	131	82	94	62
Malicious injury to horses and cattle and other wilful damage to property	489	384	532	410	658	529
Totals, Class IV	**568**	**439**	**663**	**492**	**752**	**591**
Class V.—Forgery and Other Offences against the Currency.						
Offences against the currency	73	57	43	31	65	52
Forgery and uttering forged documents	933	853	1,118	1,063	1,259	1,190
Totals, Class V	**1,006**	**910**	**1,161**	**1,094**	**1,324**	**1,242**
Class VI.—Other Offences not Included in the Foregoing Classes.						
Breaches of the Trade Marks Act	85	83	41	37	31	31
Attempt to commit suicide	192	155	198	163	175	135
Carrying unlawful weapons	294	255	320	280	292	241
Criminal negligence	215	109	159	88	267	127
Conspiracy	210	120	222	143	236	139
Indecent exposure and other offences against public morals	170	156	172	160	224	193
Intimidation	111	45	180	122	143	93
Keeping bawdy houses and inmates thereof	1,753	1,654	1,747	1,661	1,934	1,877
Offences against gambling and lottery Acts	3,788	3,700	3,917	3,747	2,889	2,674
Offences against Opium and Narcotic Drug Act	154	136	184	149	226	209
Offences against revenue laws	435	398	484	453	520	479
Illicit stills	263	247	349	335	499	460
Perjury and subornation of perjury	176	110	166	97	161	107
Prison breach and escape from prison	241	234	245	233	184	180
Riot and affray	376	294	310	249	297	229
Sodomy and bestiality	96	85	159	136	163	134
Various other misdemeanours	125	108	120	100	95	85
Totals, Class VI	**8,684**	**7,889**	**8,973**	**8,153**	**8,336**	**7,393**
Grand Totals	**39,506**	**33,531**	**42,541**	**36,059**	**43,968**	**37,148**

9.—Charges, Acquittals, Convictions, and Sentences in respect of Indictable Offences, years ended Sept. 30, 1931-37.

Note.—Juvenile delinquencies not included.

Item.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.
Charges	38,189	37,621	38,927	37,408	39,506	42,541	43,968
Acquittals	6,589	6,206	5,942	5,695	5,934	6,381	6,768
Persons detained for lunacy	58	32	43	29	41	101	52
Convictions	31,542	31,383	32,942	31,684	33,531	36,059	37,148
Males	28,935	28,181	29,465	28,539	30,195	32,689	33,365
Females	2,607	3,202	3,477	3,145	3,336	3,370	3,783
First convictions	23,474	23,841	24,576	22,805	23,844	24,109	24,291
Second convictions	3,159	2,895	3,584	3,219	3,163	3,864	4,273
Reiterated convictions	4,909	4,647	4,782	5,660	6,524	8,086	8,584
Sentences—							
Option of a fine	8,036	8,143	8,973	8,614	9,374	9,593	9,310
Under one year in gaol	8,794	9,307	10,128	10,492	10,631	11,319	12,224
One year or over in gaol	2,728	2,760	2,656	2,391	2,357	1,651	1,506
Indeterminate	7	7	4	Nil	Nil	Nil	Nil
Two years and under five in penitentiary	2,551	2,347	2,018	1,902	2,191	2,371	2,434
Five years or over in penitentiary	568	536	451	353	462	528	644
For life in penitentiary	10	9	15	5	3	6	2
Death	25	23	24	19	15	22	13
Committed to reformatories	597	376	168	297	467	2,572	2,519
Other sentences	8,226	7,875	8,505	7,611	8,031	7,997	8,496

Convictions of Females.—Over 10 p.c. of all convictions for indictable offences during 1937 were those of females. This is a slight increase over the 9·4 percentage shown in 1936. Numerically, convictions of females increased from 3,370 in 1936 to 3,783 in 1937. All provinces and territories, with the exception of British Columbia, contributed to this increase.

Women comprised a greater percentage of total convictions for 1937 than for 1936 in Prince Edward Island, Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, and Yukon and Northwest Territories. Percentage figures for Manitoba, Alberta, and British Columbia showed declines.

10.—Females Convicted of Indictable Offences, by Provinces, years ended Sept. 30, 1933-37.

Province.	Numbers of Convictions.					Percentages of Totals.				
	1933.	1934.	1935.	1936.	1937.	1933.	1934.	1935.	1936.	1937.
Prince Edward Island	Nil	Nil	2	1	5	-	-	3·4	1·3	5·1
Nova Scotia	62	66	67	67	78	5·3	6·7	6·7	5·8	7·2
New Brunswick	29	45	39	50	52	6·1	8·2	6·8	6·7	6·8
Quebec	1,353	1,240	1,533	1,466	1,652	17·5	16·1	16·4	15·4	21·2
Ontario	979	955	865	847	983	7·5	8·1	6·8	6·2	6·7
Manitoba	280	233	252	270	273	10·5	9·1	10·6	10·3	9·6
Saskatchewan	83	140	76	86	167	4·1	5·8	3·9	3·9	5·4
Alberta	261	214	140	229	246	10·3	7·9	5·8	7·3	6·8
British Columbia	430	252	362	354	325	10·6	10·1	11·7	11·7	9·7
Yukon and N.W.T.	Nil	Nil	Nil	Nil	2	-	-	-	-	11·1
Totals	**3,477**	**3,145**	**3,336**	**3,370**	**3,783**	**10·6**	**9·9**	**9·9**	**9·4**	**10·2**

11.—Persons Convicted of Indictable Offences, Classified by Occupation, Conjugal Condition, Birthplace, Religion, etc., years ended Sept. 30, 1931-37.

NOTE.—Juvenile delinquencies not included.

Item.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.
Occupation—							
Agriculture	1,780	2,026	2,087	2,267	1,935	2,531	3,286
Lumbering	117	101	119	92	85	98	136
Fishing	98	128	98	149	124	181	218
Mining	188	266	313	263	315	368	434
Manufacturing and construction	3,274	3,379	3,294	3,127	3,305	3,197	3,491
Transportation	941	804	786	769	827	1,406	1,424
Trade	3,672	3,221	3,603	3,991	4,875	6,003	5,052
Domestic service	3,467	4,034	4,311	3,436	3,858	3,777	4,187
Public service	[1]	[1]	[1]	[1]	[1]	445	415
Professional service	272	204	191	196	179	169	156
Labouring	11,409	11,072	10,911	10,077	11,773	13,470	14,325
Students	[1]	[1]	[1]	[1]	[1]	647	733
Unemployed	[1]	[1]	[1]	[1]	[1]	1,170	1,477
Not given	6,324	6,148	7,229	7,317	6,255	2,597	1,814
Totals	**31,542**	**31,383**	**32,942**	**31,684**	**33,531**	**36,059**	**37,148**
Conjugal Condition—							
Married	10,141	9,801	10,657	10,731	11,197	12,392	12,835
Single	15,003	17,464	17,424	16,074	18,710	20,759	22,061
Widowed	327	525	485	485	515	581	642
Divorced	5	12	11	9	7	23	33
Not given	6,066	3,581	4,365	4,385	3,102	2,304	1,577
Educational Status—							
Unable to read or write	464	595	485	378	369	375	332
Elementary	26,490	26,247	27,904	26,498	29,756	34,339	35,461
Superior	420	454	407	527	388	575	791
Not given	4,168	4,087	4,146	4,281	3,018	770	564
Age—							
16 years and under 21	7,266	6,718	7,050	6,130	6,097	6,875	7,503
21 years and under 40	15,810	16,419	19,445	16,496	18,180	19,244	20,446
40 years or over	4,871	5,008	5,657	5,667	6,058	6,948	7,215
Not given	3,595	3,238	790	3,391	3,196	2,992	1,984
Use of Liquors—							
Moderate	17,753	22,498	23,938	22,809	26,827	30,561	32,838
Immoderate	2,121	2,749	2,645	2,199	2,528	3,487	3,637
Not given	11,668	6,136	6,359	6,676	4,176	2,011	673
Birthplace—							
England or Wales	2,100	2,098	1,659	1,394	1,503	1,518	1,548
Ireland	394	412	456	382	393	368	449
Scotland	943	737	761	643	678	813	772
Canada	18,297	19,899	21,522	21,176	23,082	26,751	28,082
Other British possessions	169	122	145	273	140	132	147
United States	990	934	896	781	703	1,116	818
Other foreign countries	3,508	3,387	3,844	3,556	3,614	3,536	3,880
Not given	5,141	3,794	3,659	3,479	3,418	1,825	1,452
Religion—							
Baptist	686	780	705	679	856	837	1,045
Roman Catholic	10,141	11,221	12,088	11,271	13,341	15,464	15,678
Church of England	3,562	3,118	2,961	2,865	3,024	3,323	4,103
Methodist[2]	571	442	449	377	346	268	254
Presbyterian	2,836	2,358	2,277	1,927	1,945	2,004	2,430
United Church	2,050	2,321	2,212	2,230	2,356	2,887	3,567
Other Protestant	3,695	3,943	4,528	4,447	4,684	4,747	3,724
Jewish	618	687	606	622	807	538	486
Other denominations	2,793	2,489	2,806	2,373	2,555	3,129	4,040
Not given	4,590	4,024	4,310	4,893	3,617	2,862	1,821
Residence—							
Cities and towns	24,210	24,547	22,395	24,718	26,203	27,749	28,247
Rural districts	6,648	6,490	7,260	6,801	6,952	8,310	8,901
Not given	684	346	3,287	165	376	Nil	Nil

---

[1] Not reported separately prior to 1936.

[2] Notwithstanding the fact that the United Church of Canada was completely organized in 1926, these persons still reported themselves as Methodists.

Recidivism.—The number of those offenders who relapse into crime after a first conviction has been steadily increasing. In the latest five years the number of first offenders convicted of indictable offences has decreased from 74·6 p.c. of the total of convictions for this class of offence to 65·4 p.c. Table **12** shows the numbers of first and second offences and of reiterated offences of an indictable nature for which convictions were made in the five latest years, together with the percentage of each of these classes to the total.

12.—Numbers and Percentages of First Offences, Second Offences, and Reiterated Offences of an Indictable Nature, years ended Sept. 30, 1933-37.

Class of Offence.	Numbers of Convictions.					Percentages of Totals.				
	1933.	1934.	1935.	1936.	1937.	1933.	1934.	1935.	1936.	1937.
First	24,576	22,805	23,844	24,109	24,291	74·60	71·98	71·11	66·86	65·38
Second	3,584	3,219	3,163	3,864	4,273	10·88	10·16	9·43	10·72	11·50
Reiterated	4,782	5,660	6,524	8,086	8,584	14·52	17·86	19·46	22·42	23·12
Totals	**32,942**	**31,684**	**33,531**	**36,059**	**37,148**	**100·00**	**100·00**	**100·00**	**100·00**	**100·00**

Subsection 2.—Summary Convictions of Adults.

The following statistics relate to non-indictable offences committed by adults (persons 16 years of age or over) and disposed of by police magistrates or other justices of the peace, under authority of the Summary Convictions Act. Such convictions numbered 420,212 during the year ended Sept. 30, 1937, an increase of 42,506, or 11·25 p.c., as compared with 1936. Every province, with the exception of Quebec, showed an increase in the total of convictions for non-indictable offences.

13.—Summary Convictions, by Provinces, years ended Sept. 30, 1911-37.

NOTE.—For figures for 1900-10, see p. 1020 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911	375	5,306	2,766	17,729	34,871	12,366	7,317	9,350	10,380	145	28	100,633
1912	437	5,920	3,022	24,335	42,104	13,985	9,184	15,254	16,472	163	84	130,960
1913	443	6,353	3,136	29,714	51,396	16,513	11,711	17,513	17,882	157	[1]	154,818
1914	498	6,613	2,872	30,563	56,874	14,840	11,854	16,806	20,481	196		161,597
1915	346	5,774	2,833	24,152	49,942	11,266	9,650	12,331	15,993	143		132,430
1916	405	5,924	2,664	20,767	41,732	7,826	9,287	9,526	6,344	156		104,631
1917	323	4,700	2,564	22,560	42,655	7,065	6,007	5,726	6,768	84		98,452
1918	209	4,794	1,611	25,374	46,448	7,298	6,536	6,744	6,821	64		105,899
1919	236	5,533	2,447	30,881	44,587	8,128	6,180	5,961	7,638	32		111,623
1920	340	5,790	3,405	40,801	55,049	11,093	6,523	7,219	13,996	49		144,265
1921	373	4,639	2,680	45,042	63,874	9,563	6,137	8,571	14,460	37		155,376
1922	309	3,332	2,281	31,441	63,015	9,530	6,876	7,766	11,720	52		136,322
1923	321	3,033	2,179	27,563	64,639	11,377	8,346	8,359	11,639	37		137,493
1924	232	3,355	2,499	22,803	73,768	11,189	7,274	8,342	13,508	29		142,999
1925	235	2,790	2,417	25.364	79,470	10,724	8,020	7,840	14,875	29	61	151,825
1926	345	3,568	2,418	24,428	90,061	13,913	8,614	8,142	18,337	45	42	169,913
1927	392	4,362	2,565	28,732	101,345	16,420	8,243	8,801	22,292	54	34	193,240
1928	662	4,499	3,031	29,302	146,586	19,921	9,108	10,927	21,598	72	57	245,763
1929	783	6,231	4,032	51,099	153,385	26,536	11,413	13,939	22,499	94	32	290,043
1930	906	6,299	4,072	60,098	163,913	26,879	11,574	12,904	21,989	86	39	308,759
1931	838	5,324	4,533	99,381	153,451	22,625	10,691	13,113	17,671	80	71	327,778
1932	825	3,573	3,841	112,132	131,374	18,218	7,538	8,180	12,148	55	25	297,909
1933	655	3,922	3,483	117,433	124,589	15,396	6,355	9,698	11,051	68	23	292,673
1934	733	4,216	3,598	115,313	160,895	16,985	5,680	7,896	13,369	28	31	328,744
1935	924	4,818	3,968	118,499	190,763	15,685	5,749	8,398	13,759	41	38	262,642
1936	956	5,593	4,691	111,254	204,744	17,476	5,750	8,810	18,349	58	25	377,706
1937	1,438	6,249	5,706	99,404	237,309	28,500	7,580	10,910	22,997	62	57	420,212

---

[1] Included with Manitoba, since that part of the N.W.T. from which earlier returns were received was included in Manitoba by the Extension of Boundaries Act, 1912. Later figures are for the present area of the N.W.T.

The marked increase in the past nine or ten years has been due almost entirely to breaches of traffic regulations, which have risen from 96,340 in 1927 to 288,688 in 1937, or from 50 p.c. to nearly 69 p.c. of the total summary convictions. Drunkenness, breaches of by-laws, vagrancy, and offences against liquor Acts all show increases in convictions in 1937 over 1936. Offences against gambling Acts show a substantial decrease.

14.—Summary Convictions, by Offences, years ended Sept. 30, 1933-37.

Offence.	1933.	1934.	1935.	1936.	1937.	Increase or Decrease 1936-37.
	No.	No.	No.	No.	No.	No.
Assault	3,658	3,777	3,690	3,433	3,508	+ 75
Carrying fire-arms and unlawful weapons	361	280	258	388	323	− 65
Contempt of court	26	13	66	116	37	− 79
Cruelty to animals	244	305	263	259	266	+ 7
Disturbing religious and like meetings	44	14	19	43	48	+ 5
Fishery and game Acts, offences against	1,755	1.442	1,724	2,149	2,500	+351
Gambling Acts, offences against	22,191	30,699	25,889	40,670	14,360	−26,310
Immigration Act, offences against	41	29	24	28	19	− 9
Inspection and Sales Act, offences against	303	423	399	340	272	− 68
Adulteration of food (food and drugs Acts)	162	202	244	201	321	+120
Weights and measures Acts, offences against	155	181	379	361	331	− 30
Liquor, prohibition and temperance Acts, offences against	10,489	10,754	8,826	10,073	11,142	+ 1,069
Malicious or wilful damage to property	811	729	790	785	806	+ 21
Masters and servants Acts, offences against	219	205	224	292	353	+ 61
Non-payment of wages	1,492	1,246	1,540	1,385	1,489	+104
Breaches of traffic regulations	186.848	217,827	246,123	237,183	288,688	+51,505
Breaches of by-laws	14,218	15,098	17,646	20,456	25,414	+ 4,958
Non-support of family and neglecting children	1,363	1,435	1,415	1,607	2,062	+455
Contributing to delinquency of children	952	939	862	1,033	931	−102
Opium and Narcotic Drug Act, various offences against	59	69	29	32	11	− 21
Profanation of the Lord's Day	929	994	869	1,087	1,426	+339
Railway Acts, various offences against	1,663	1,297	1,150	959	731	−228
Trespass on railway	915	565	713	588	565	− 23
Stealing ride on railway	2,277	1,076	1,017	524	388	−136
Revenue laws, offences against	1,076	923	2,604	3,345	4,011	+666
Trespass	844	518	381	505	560	+ 55
Vagrancy	11,109	6,424	7,966	7,416	8,744	+ 1,328
Drunkenness	18,910	20,764	25,643	28,433	34,606	+ 6,173
Insulting, abusive, and profane language	346	163	180	347	144	−203
Frequenting bawdy houses	3,980	2,618	2,674	2,725	3,598	+873
Loose, idle, disorderly conduct and disturbing the peace	2,613	4,787	5,777	7,515	7,709	+194
Various other offences	2,620	2,948	3,258	3,428	4,849	+ 1,421
Totals	**292,673**	**328,744**	**362,642**	**377,706**	**420,212**	**+42,506**

Convictions for Drunkenness.—The number of summary convictions for drunkenness in Canada in 1937 was 34,606, an increase of 21·7 p.c. over 1936. This was the highest point reached since 1930, when 35,789 convictions were recorded.

Maximum figures were attained in the years 1913 and 1914; during the War there was an appreciable reduction and since the War, while figures have fluctuated, they have not approximated former high levels.

15.—Convictions for Drunkenness, by Provinces, years ended Sept. 30, 1911-37.

NOTE.—For figures for 1900-10, see p. 1021 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911......	238	3,149	1,944	6,805	11,347	5,832	2,359	4,041	5,594	63	7	41,379
1912......	309	3,693	2,116	9,863	12,785	6,925	2,462	6.657	8,275	72	14	53,171
1913......	324	3,955	2,073	12,265	16,236	7,493	2,970	7,283	8,316	60		60,975
1914......	342	3,999	1,765	12,776	17,703	6,193	2,142	5,710	9,376	61		60,067
1915......	231	3,436	1,694	8,939	12,553	4,154	1,332	2,802	5,960	60		41,161
1916......	219	3,614	1,696	7,108	11,728	3,114	1,062	1,809	2,327	53		32,730
1917......	207	2,546	1,516	8,025	10,945	1,085	770	391	2,372	25		27,882
1918......	96	2,435	704	6,680	7,932	1,123	434	825	778	19		21,026
1919......	116	2.879	1,350	7,116	8,498	1,570	618	1,057	1,004	9	[1]	24,217
1920......	120	3,140	1,882	11,863	15,021	2,330	919	1,536	2,948	10		39,769
1921......	144	2,156	1,264	9,944	14,498	1,429	708	1,838	2,379	2		34,362
1922......	162	1,492	1.088	7,103	10,063	1,623	816	1,608	1,081	12		25,048
1923......	164	1,392	1,074	6,260	11,370	1,680	884	1,277	1.443	21		25,565
1924......	94	1,456	1,176	6,146	12,993	1,948	505	1,464	1,545	11		27,338
1925......	112	1,466	1,171	6,342	11,811	1,948	668	1,374	1,844	9	6	26,751
1926......	168	1.898	1,234	5,364	13,752	1,871	487	1,413	2,114	6	10	28,317
1927......	182	2,053	1,397	7,000	14,334	1,883	618	1,182	2,496	26	Nil	31,171
1928......	263	2,176	1,285	6,362	15,931	1,863	1,014	1,538	2,758	34	"	33,224
1929......	406	3,284	1,814	8,328	17,620	1.830	794	1,810	2,898	42	"	38,826
1930......	393	3,236	1,706	7,649	15,970	1,392	674	1,551	3,183	35	"	35,789
1931......	446	2,137	1,541	7,461	12,404	1,089	466	1,191	2,372	41	"	29,148
1932......	355	1,402	1,142	5,913	10,388	1,023	319	908	1,195	19	"	22,664
1933......	297	1,478	1,127	4,575	8,724	737	286	589	1,068	28	1	18,910
1934......	401	1,486	1,505	4,776	9,060	826	304	609	1,781	12	4	20,764
1935......	475	1,933	1,755	4,705	12,386	1,054	379	692	2,230	29	5	25,643
1936......	558	2,221	2,187	5,332	13,049	1,125	418	785	2,734	21	3	28.433
1937......	559	2,577	2,809	7,544	15,960	1,050	425	929	2,720	14	19	34,606

---

[1] Included with Manitoba, since that part of the N.W.T. from which earlier returns were received was included in Manitoba by the Extension of Boundaries Act, 1912. Later figures are for the present area of the N.W.T.

Offences against the Liquor Acts.—Until the Great War, alcoholic liquors were generally sold under specified conditions by licensed hotels or licensed shops. Offences against the liquor Acts usually represented a breach of the conditions of sale. During the War, prohibition was generally established but in more recent years the tendency has been for the Provincial Governments to take over the sale of liquor through commissions and derive a revenue therefrom (see pp. 622-624). Eight of the nine provinces now have their liquor commissions, Prince Edward Island being the only province in which prohibition prevails. In these circumstances, the convictions for offences against the liquor Acts in 1929 reached the highest figure on record, *viz.*, 19,327, but have since fallen off to 11,142 in 1937. The numbers of such convictions in each year since 1911 are given by provinces in Table **16.**

16.—Convictions for Offences against the Liquor Acts, by Provinces, years ended Sept. 30, 1911-37.

Note.—For figures for 1900-10, see p. 1022 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	N.W.T.	Canada.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1911......	38	592	278	1,032	1,759	46	240	423	318	33	16	4,775
1912......	36	551	361	859	2,117	85	366	605	625	40	26	5,671
1913......	26	502	447	791	2,167	166	528	560	741	41	[1]	5,969
1914......	72	660	365	882	2,328	166	404	551	394	49		5,871
1915......	42	633	390	1,021	2,018	124	378	573	246	27		5,452
1916......	75	646	352	1,015	2,002	172	967	713	295	11		6,248
1917......	36	449	312	1,076	2,927	289	774	885	576	15		7,339
1918......	42	412	288	1,155	3,410	230	422	678	812	23		7,472
1919......	37	479	387	1,479	3,353	175	434	436	597	6		7,383
1920......	23	394	585	1,975	4,385	380	452	618	1,427	8		10,247
1921......	44	362	419	1,384	4,938	427	583	907	1,394	2		10,460
1922......	28	267	366	954	3,246	392	708	1,043	1,503	12		8,519
1923......	39	264	364	1,724	3,958	542	997	990	1,196	14		10,088
1924......	29	293	375	1,549	4,678	452	966	817	1,286	4		10,449
1925......	51	235	319	1,919	5,047	512	1,078	758	1,699	9	9	11,636
1926......	53	499	393	2,104	6,362	786	1,231	737	1,345	2	Nil	13,512
1927......	66	610	271	2,025	5,620	627	1,245	814	1,186	13	"	12,477
1928......	69	688	478	2,096	7,812	598	1,174	944	1,350	22	32	15,263
1929......	81	804	486	3,392	9,034	1,399	1,542	1,017	1,556	8	8	19,327
1930......	98	532	469	3,043	8,995	1,180	1,392	970	1,432	14	7	18,132
1931......	52	588	541	2,956	8,044	1,144	1,042	888	907	13	10	16,185
1932......	50	353	489	2,379	6,057	900	629	557	790	14	8	12,226
1933......	52	586	559	1,755	5,067	708	553	410	782	13	4	10,489
1934......	80	750	622	2,325	4,324	826	543	452	820	3	9	10,754
1935......	79	699	567	1,776	3,225	792	506	472	692	8	10	8,826
1936......	37	698	610	1,252	4,185	940	570	784	965	24	8	10,073
1937......	166	706	596	1,376	4,788	849	734	1,018	874	28	7	11,142

[1] See footnote to Table 15, p. 1063.

Breaches of Traffic Regulations.—Convictions for breaches of traffic regulations (Table **17**), which at the beginning of the century numbered only 185 in all Canada, have, as a result of the growing density and increasing use of motor vehicles, become the largest element in the non-indictable offences. Such convictions reached a record total of 288,688 in 1937, when they represented 69 p.c. of the total of 420,212 (see Table **14**) summary convictions. Convictions for breaches of traffic regulations in 1937 showed increases in all provinces.

17.—Convictions for Breaches of Traffic Regulations, by Provinces, years ended Sept. 30, 1911-37.

NOTE.—For figures for 1900-10, see p. 1023 of the 1933 Year Book.

Year.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon.	Canada.[1]
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No
1911.............	19	86	17	267	3,376	1,116	96	139	661	Nil	5,777
1912.............	8	97	24	1,806	5,928	1,778	215	838	1,768	"	12,462
1913.............	9	83	5	3,373	6,697	3,030	248	672	1,883	"	16,000
1914.............	7	176	69	2,643	4,717	2,419	410	754	2,051	Nil	13,246
1915.............	6	62	101	1,509	4,494	1,865	204	503	1,804	1	10,549
1916.............	7	228	57	2,146	5,577	1,043	321	380	615	7	10,381
1917.............	13	324	54	1,677	9,854	2,619	441	533	813	10	16,338
1918.............	17	523	80	3,505	12,206	2,700	418	736	995	1	21,181
1919.............	15	509	62	4,971	13,374	3,123	863	701	1,677	1	25,296
1920.............	129	600	49	11,499	19,708	4,987	744	1,673	3,780	1	43,170
1921.............	109	443	87	12,335	26,860	4,995	700	1,845	4,412	2	51,788
1922.............	38	289	315	3,344	31,813	4,968	1,112	1,996	4,101	1	47,977
1923.............	36	397	196	1,746	33,402	6,182	1,246	2,514	4,095	1	49,815
1924.............	49	350	237	3,818	40,530	6,412	1,282	2,301	5,084	Nil	60,063
1925.............	27	200	281	4,976	44,618	5,971	1,375	1,940	4,389	1	63,778
1926.............	64	263	180	5,534	52,727	8,588	1,730	2,059	6,882	Nil	78.027
1927.............	69	402	244	6,418	62,037	10,871	1,610	2,459	12,268	2	96,380
1928.............	228	462	516	6,273	101,356	14,099	2,100	3,481	12,976	2	141,493
1929.............	152	859	887	19,427	105,703	19,460	3,643	5,612	10,592	2	166,337
1930.............	212	831	757	28,633	115,073	20,672	3,727	4.903	10,776	Nil	185,584
1931.............	95	999	1,200	64,611	111,718	16,556	4,259	5,070	7,851	2	212,361
1932.............	174	643	842	70,253	94,188	13,251	2,811	2,755	5,743	Nil	190,660
1933.............	82	628	693	72,464	91,521	11,021	1,859	3,282	5,298	"	186,848
1934.............	57	638	528	64,429	128,604	12,725	1,624	2,819	6,403	"	217,827
1935.............	101	760	609	69,671	153,142	11,664	1,720	2,669	5,787	"	246,123
1936.............	77	1,099	720	46,464	162,951	12,900	1,839	2,817	8,315	1	237,183
1937.............	252	1,179	1,011	57,174	186,825	23,711	2,706	3,536	12,294	Nil	288,688

---

[1] No convictions were reported for the Northwest Territories.

For the year 1937, Ontario, which had 47 p.c. of the registrations of motor vehicles in Canada (see p. 663), had 65 p.c. of the total convictions; Quebec in the same year had 15 p.c. of the motor vehicles and 20 p.c. of the convictions; and Manitoba 6·1 p.c. of the motor vehicles and 8·2 p.c. of the convictions. In interpreting the figures in this way, however, it should be pointed out that traffic regulations are by no means uniform throughout Canada and no account is taken of the differences in the degrees of urbanization in the provinces. Thus, the above three provinces contain large centres of population, while in the Maritime Provinces, Saskatchewan, and Alberta, with lower degrees of urbanization, convictions were low in proportion to the number of motor vehicles registered.

Sex of Offenders.—Between 1926 and 1937 the numbers of females convicted of summary offences increased by 136·0 p.c. In proportion to the numbers of male offenders, however, they showed a decrease, only 5·8 p.c. of the offenders convicted summarily in 1937 being females, as against 6·1 p.c. in 1926. By sexes, the summary convictions appear as follows: 1926, males 159,528, females 10,385; 1927, males 182,392, females 10,848; 1928, males 232,554, females 13,209; 1929, males 274,977, females 15,066; 1930, males 292,557, females 16,202; 1931, males 312,111, females 15,667; 1932, males 281,318, females 16,591; 1933, males 275,229, females 17,444; 1934, males 311,542, females 17,202; 1935, males 339,494, females 23,148; 1936, males 355,772, females 21,934; 1937, males 395,699, females 24,513.

Section 3.—Juvenile Delinquency.

The terms 'indictable' and 'non-indictable' are applied only to offences of adults, similar offences committed by juveniles (persons under 16 years of age) being termed 'major' offences and 'minor' offences, respectively.

Table 18 shows the numbers of convictions of juveniles for all offences, classified as major and minor offences, for the judicial years 1922-37. No separation by class of offence is available for earlier years. The rates per 100,000 population in this table apply to the total population, no estimates by age-groups being available for intercensal years. Between 1930 and 1937, a definite upward trend is discernable in the column of percentage of major offences to all offences, but, when studied in relation to population growth, both major offences and minor offences have shown definite improvement since 1930.

18.—Convictions of Juveniles for All Offences, showing Percentages of Major and Minor Offences, and Rates per 100,000 of Total Population, years ended Sept. 30, 1922-37.

NOTE.—In this table "Property without violence" includes Classes III and IV and "Other Offences" includes Classes V and VI.

Year.	Major Offences.							Minor Offences, Total and Ratios.			Grand Total Delinquents.
	Offences against—			Other Major Offences.	Major Offences, Total and Ratios.						
	The Person.	Property With Violence.	Property Without Violence.								
	No.	No.	No.	No.	No.	P.C. of All Offences.	Per 100,000 Pop.	No.	P.C. of All Offences.	Per 100,000 Pop.	No.
1922...	172	806	3,001	86	4,065	64·6	46	2,233	35·4	25	6,298
1923...	179	755	3,204	27	4,165	63·4	46	2,406	36·6	27	6,571
1924...	221	818	3,510	106	4,655	60·0	51	3,104	40·0	34	7,759
1925...	207	794	3,899	180	5,080	64·4	55	2,807	35·6	31	7,887
1926...	220	659	4,053	158	5,090	65·0	54	2,741	35·0	29	7,831
1927...	179	772	4,109	96	5,156	63·0	54	3,029	37·0	32	8,185
1928...	184	824	3,902	153	5,063	64·4	51	2,636	35·6	27	7,699
1929...	223	976	3,786	121	5,106	65·2	51	2,720	34·8	27	7,826
1930...	199	951	4,419	84	5,653	67·1	55	2,772	32·9	27	8,425
1931...	256	961	3,938	156	5,311	68·5	51	2,457	31·5	24	7,768
1932...	232	927	3,799	138	5,096	69·2	49	2,267	30·8	22	7,363
1933...	247	972	3,825	100	5,144	69·0	48	2,309	31·0	22	7,453
1934...	227	1,072	3,918	136	5,353	68·6	49	2,453	31·4	23	7,806
1935...	248	1,031	4,174	61	5,514	71·8	50	2,165	28·2	20	7,679
1936...	203	1,019	3,660	88	4,970	68·9	45	2,240	31·1	20	7,210
1937...	186	1,222	3,718	98	5,224	67·7	47	2,492	32·3	22	7,716

While, officially, juveniles are persons under 16 years of age, public interest in the question of offences committed by 'young persons' has greatly increased in recent years, and, in response to this interest, the following table has been compiled, in which the convictions for indictable offences of persons aged over 16 and under 21 have been added to the figures of juveniles found guilty of major offences. The rates per 100,000 population are the proportion of the offences committed by persons in any one age group, the figures of population being taken from the decennial censuses, except in the case of the two latest years, where the population in each age group is the officially estimated population.

It will be observed that the age group 16 to under 21 years shows a much higher crime rate than the juvenile group (7 to 16 years) or the total young persons group (7 to under 21 years). For 1911, the 16 to under 21 group shows a rate per 100,000 population of the same age which is 127 greater than that shown for juveniles and 83 greater than the general rate for young persons; for 1921, the proportion is 227 per 100,000 greater than the juvenile rate and 155 greater than the young persons rate; by 1931 the rate had increased to 359 greater than the juvenile rate and 236 greater than the young persons rate. In the two latest years the rate of this group continued to rise, reaching 443 convictions per 100,000 over the juvenile rate and 289 over the young persons rate in 1937.

19.—Convictions of Juveniles for Major Offences and of Adults Aged 16-21 for Indictable Offences, by Age Groups and Rates per 100,000 Population of the Same Age, years ended Sept. 30, 1911, 1921, 1931, and 1936-37.

Year.	Convictions of Persons 7 to Under 16 Years of Age. (Juveniles).	Convictions of Persons 16 to Under 21 Years of Age.	Total Convictions of Persons 7 to Under 21 Years of Age.	Proportion of Offenders per 100,000 7 to Under 16 Years.	Proportion of Offenders per 100,000 16 to Under 21 Years.	Proportion of Offenders per 100,000 7 to Under 21 Years.
1911	1,439	1,640	3,079	111	238	155
1921	3,247	3,288	6,535	192	419	264
1931	5,311	6,453	11,764	271	630	394
1936	4,970	6,875	11,845	247	664	389
1937	5,224	7,503	12,727	265	708	419

20.—Juvenile Delinquents Convicted of Major and Minor Offences, by Provinces and Sex, years ended Sept. 30, 1936 and 1937.

Province.	Major Offences.				Minor Offences.			
	Males.		Females.		Males.		Females.	
	1936.	1937.	1936.	1937.	1936.	1937.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.	No.
Prince Edward Island	19	44	1	2	Nil	4	Nil	1
Nova Scotia	309	328	12	16	82	148	14	22
New Brunswick	194	262	10	14	61	86	1	7
Quebec	1,278	1,350	46	42	633	683	224	292
Ontario	1,959	1,955	62	61	802	906	102	86
Manitoba	243	184	32	12	38	15	11	7
Saskatchewan	217	301	11	10	8	19	2	1
Alberta	296	332	19	12	95	97	6	7
British Columbia	259	287	3	12	138	93	23	18
Canada[1]	**4,774**	**5,043**	**196**	**181**	**1,857**	**2,051**	**383**	**441**

---

[1] No convictions were reported for the Territories.

Major Offences.—In Table **21** are shown the various major offences for which juvenile delinquents were convicted from 1931 to 1937. It will be observed that theft, house- and shop-breaking with theft, and other wilful damage to property account for the great bulk of the offences; in 1937, 91 p.c. of the major offences were of this character.

21.—Juvenile Delinquents Convicted of Major Offences, by Offences, years ended Sept. 30, 1930-37.

Offence.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
	No.	No.	No.	No.	No.	No.	No.	No.
Murder	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Manslaughter	"	1	"	1	"	"	1	"
Rape, carnal knowledge and incest	5	8	5	8	15	8	10	8
Indecent assault	49	42	34	28	24	29	31	32
Aggravated assault and wounding	10	52	68	16	36	60	24	31
Common assault	101	119	104	139	115	98	102	83
Endangering life on railway	31	32	17	50	31	48	30	27
Other offences against the person	3	2	4	5	6	5	5	5
Breaking, entering, and theft	944	948	914	957	1,071	1,022	1,015	1,204
Robbery	7	13	13	15	1	9	4	18
Theft and receiving stolen goods	3,662	3,139	3,093	3,155	3,094	3,548	3,094	3,128
False pretences and fraud	24	11	9	9	20	14	12	14
Arson	31	39	19	24	28	13	15	10
Other wilful damage to property	702	749	676	637	776	599	539	565
Forgery and offences against the currency	17	10	11	4	11	12	11	10
Immorality	52	109	85	72	73	35	52	48
Various other offences	15	37	44	24	52	14	25	41
Totals	**5,653**	**5,311**	**5,096**	**5,144**	**5,353**	**5,514**	**4,970**	**5,224**

Recidivism.—The number of juvenile delinquents who have previously appeared before a court has generally increased although the fluctuations between individual years are rather wide over the period for which figures are available. As shown in Table **22**, nearly a third of the juveniles convicted of major offences in 1937 had previously been found guilty, as compared with less than a fourth of those convicted of similar offences in 1928.

22.—Juvenile Offenders Convicted of Major Offences, showing Number of Times Convicted, years ended Sept. 30, 1928-37.

Year.	Times Convicted.					Total Offenders.	Total 'Repeaters'.	Per Cent of 'Repeaters' to Total Offenders.
	First.	Second.	Third.	Fourth.	Fifth or Over.			
1928	3,933	501	238	135	256	5,063	1,130	22·32
1929	3,918	425	287	165	311	5,106	1,188	23·27
1930	4,354	527	296	169	307	5,653	1,299	22·98
1931	4,013	540	308	158	292	5,311	1,298	24·48
1932	3,660	597	323	199	317	5,096	1,436	28·18
1933	3,787	586	339	145	287	5,144	1,357	26·38
1934	3,907	617	357	177	295	5,353	1,446	27·01
1935	4,053	674	397	185	205	5,514	1,461	26·50
1936	3,446	721	353	203	247	4,970	1,524	30·66
1937	3,637	787	359	197	244	5,224	1,587	30·38

Minor Offences.—Table 23 shows the numbers of juveniles convicted of minor offences in the years ended Sept. 30, 1933-37, by main classes, with percentages of each class of offence to total offences, and rates per 100,000 of total population. In 1937 there was an increase of 252 convictions, or 11 p.c., over the 1936 figure.

23.—Convictions of Juveniles for Minor Offences showing Percentages of Minor Offences to All Offences and Rates per 100,000 Population, years ended Sept. 30, 1933-37.

Class of Offence.	NUMBERS. 1933.	1934.	1935.	1936.	1937.
Traffic regulations	115	174	107	159	193
Disorderly conduct and disturbing the peace	457	567	312	476	428
Incorrigibility	498	574	495	530	702
Truancy	203	268	234	277	274
Vagrancy and wandering away from home	217	225	301	203	117
Other minor offences	819	645	716	595	778
Totals, Minor Offences	2,309	2,453	2,165	2,240	2,492

RATIOS PER CENT OF TOTAL AND PER 100,000 OF POPULATION.

Class of Offence.	1933.		1934.		1935.		1936.		1937.	
	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.	Per Cent.	Per 100,000 Pop.
Traffic regulations	1·5	1	2·2	2	1·4	1	2·2	1	2·5	2
Disorderly conduct and disturbing the peace	6·1	4	7·3	5	4·1	3	6·6	4	5·5	4
Incorrigibility	6·7	5	7·3	5	6·4	5	7·4	5	9·1	6
Truancy	2·7	2	3·4	3	3·1	2	3·8	3	3·6	2
Vagrancy and wandering away from home	3·0	2	2·9	2	3·9	2	2·8	2	1·5	1
Other minor offences	11·0	8	8·3	6	9·3	7	8·3	5	10·1	7
Percentages, Minor Offences to All Offences	31·0	22	31·4	23	28·2	20	31·1	20	32·3	22

Section 4.—Municipal Police Statistics.

Police statistics were collected in 1937 from 160 cities and towns of 4,000 population or over in 1931 (1936, for the three Prairie Provinces), aggregating a total of 4,435,472 persons. The total number of police was 5,502 which is an average of one policeman to each 806 persons in the population of those cities and towns.

The returns showed a total of 453,950 crimes known to have been committed; 121,960 arrests were made and 244,342 summonses issued. The prosecutions numbered 360,437 with 304,906 convictions.

Automobiles reported stolen numbered 8,452 during 1937, of which 8,339 or 98·7 p.c. were recovered; 12,318 bicycles were stolen with 7,439 or 60·4 p.c. recovered. The value of other goods reported stolen was $1,893,766 with $1,254,679 or 66·2 p.c. recovered. There were 43,752 automobile accidents reported to the police, and 452 deaths and 15,007 injuries resulted from such accidents. Other accidents reported resulted in the death of 487 persons and injuries to 6,542.

24.—Police Statistics of Canadian Cities and Towns, by Provinces, 1936 and 1937.

Year and Province.	Cities and Towns.	Population.	Police.	Arrests.	Summonses.	Population per Policeman.	Arrests per Policeman.
	No.	No.	No.	No.	No.	No.	No.
1936.							
Prince Edward Island..	1	12,361	9	517	180	1,373	57
Nova Scotia...........	13	176,444	149	5,211	1,813	1,184	35
New Brunswick........	6	94,005	96	3,768	539	979	39
Quebec................	43	1,435,110	2,230	57,560	50,814	644	26
Ontario...............	69	1,756,865	1,832	34,729	125,907	959	19
Manitoba.............	7	273,012	306	4,757	17,320	892	16
Saskatchewan..........	8	149,015	130	2,344	2,652	1,146	18
Alberta...............	4	186,747	197	3,761	4,565	948	19
British Columbia......	10	349,191	486	10,493	12,827	719	22
Totals, 1936........	**161**	**4,432,750**	**5,435**	**123,140**	**216,617**	**816**	**23**
1937.							
Prince Edward Island..	1	12,361	8	571	288	1,545	71
Nova Scotia...........	13	176,444	146	5,380	2,192	1,215	37
New Brunswick........	6	93,985	92	4,156	1,047	1,022	45
Quebec................	43	1,435,170	2,248	39,090	56,536	638	17
Ontario...............	69	1,764,789	1,867	40,894	141,845	945	22
Manitoba..............	6	265,232	304	4,600	27,443	872	15
Saskatchewan..........	8	146,004	133	2,496	3,170	1,098	19
Alberta...............	4	192,296	205	4,215	4,583	938	21
British Columbia......	10	349,191	499	20,558	7,238	700	46
Totals, 1937........	**160**	**4,435,472**	**5,502**	**121,960**	**244,342**	**806**	**22**

The Royal Canadian Mounted Police is dealt with in Chapter XXVIII—Miscellaneous Administration—at pp. 1097-1098.

Section 5.—Penitentiary Statistics.

The Penitentiaries Branch of the Department of Justice is charged with the administration of the various penitentiaries of Canada. Seven institutions are included in the system, the two largest of which are at Portsmouth, Ont., and St-Vincent de Paul, Que., while the other five are at Dorchester, N.B.; Prince Albert, Sask.; Stony Mountain, Man.; New Westminster, B.C.; and Collins Bay, Ont. During the fiscal year ended Mar. 31, 1938, the average daily population of these institutions was 3,279 and the total net cash outlay for the year was $2,510,793 or $2·10 per convict per diem, compared with 3,103 average daily population and $2,307,716 total net cash outlay or $2·04 per convict per diem for the year 1936.

The special penitentiary for Doukhobors on Piers island, which was administered under the warden of the penitentiary at New Westminster, was in operation from 1932 to Mar. 28, 1935, when the 39 remaining inmates were transferred to New Westminster. The statistics of this special penal colony are included with those of the regular penitentiaries in the following tables, and the reader is referred to p. 1035 of the 1936 Year Book for details of the Piers Island colony, given by sex, age, race, and conjugal condition.

Female convicts are kept in the penitentiary at Portsmouth, Ont., a suburb of Kingston, where special quarters and staff are maintained for their detention and supervision. Female convicts in custody there on Mar. 31, 1938, numbered 39 compared with 32 in 1937, and 30 in 1936.

Movement of Population of Penal Institutions.—Penal institutions may be classified under four heads: (1) penitentiaries, with slow turnover, since prisoners have long sentences; (2) reformatories for boys; and (3) reformatories for girls, also with rather slow turnovers, but more rapid in the case of boys than in that of girls; and (4) common gaols, where the turnover is extremely rapid. If the average population for the year be taken as the average of the inmates at the beginning and at the end of the year, and the number discharged be the turnover, the turnover in 1937 was: in penitentiaries, 42·6 p.c.; in reformatories for boys, 228 p.c.; in reformatories for girls, 86 p.c.; in gaols, no less than 1,434 p.c. Thus, the average time spent in gaol was about 3·6 weeks. In dealing with these figures it must be borne in mind that the common gaol population changes from day to day, and is partly made up of accused persons awaiting trial who may be liberated to-day or sent to a penitentiary or reformatory to-morrow.

25.—Population of Penal Institutions, 1935-37.

Note.—Penitentiary statistics until 1919 were supplied directly by each penitentiary and were for the calendar year. For 1920 and subsequent years they have been supplied by the Superintendent of Penitentiaries and are for the fiscal years ended Mar. 31. Commencing with the fiscal year 1937 they have been compiled by the Dominion Bureau of Statistics. For other institutions, the figures are for the years ended Sept. 30.

Year and Type of Institution.	In Custody, Beginning of Year.	Admitted during Year.	Discharged during Year.	In Custody, End of Year.
	No.	No.	No.	No.
1935.				
Penitentiaries	4,220	1,477	2,145	3,552
Reformatories for boys	2,987	6,343	6,507	2,823
Reformatories for girls	734	573	585	722
Gaols	3,958	53,128	53,667	3,419
Totals, 1935	**11,899**	**61,521**	**62,904**	**10,516**
1936.				
Penitentiaries	3,552	1,558	2,012	3,098
Reformatories for boys	2,823	7,222	6,577	3,468
Reformatories for girls	722	487	569	640
Gaols	3,419	53,752	53,223	3,948
Totals, 1936	**10,516**	**63,019**	**62,381**	**11,154**
1937.				
Penitentiaries	3,098	1,521	1,355	3,264
Reformatories for boys	3,468	8,169	8,053	3,584
Reformatories for girls	640	462	524	578
Gaols	3,948	60,397	59,933	4,412
Totals, 1937	**11,154**	**70,549**	**69,865**	**11,838**

Tables 26 to 28 give the more important penitentiary statistics as reported to the Bureau. The number of convicts in penitentiaries was 1,865 in 1910, rose to 2,118 in 1916 and declined to 1,468 in 1918. After demobilization and the depression of 1921, the number of convicts rose to 2,640 in 1922, declined to 2,225 in 1924, and then increased to 4,164 in 1932. The increase was particularly rapid after 1929, amounting to 1,395 or 44 p.c. in three years. The number of convicts in 1936, at 3,098, was lower than in any year since 1929, but, in 1937 there was an increase of 5·4 p.c. with a further increase of 9·7 p.c. in 1938. The number of paroles, as shown in Table 26, numbered 190 in 1938.

Table 27 shows the ages of convicts by groups. In 1938, of the total of 3,580, 5·4 p.c. were under 20 years of age; 45·6 p.c. between 20 and 30 years of age;

thus 51 p.c. were under 30. In 1914, there were 2,003 convicts of whom 9·3 p.c. were under 20 and 44·4 p.c. between 20 and 30, a total of 53·7 p.c. under 30. In 1923, there were 2,486 convicts and 11·3 p.c. were under 20, 46·6 p.c. between 20 and 30, or 57·9 p.c. under 30 years of age. The average age of convicts in 1938 was 32·3 years and in 1937 31·2 years. Detailed statistics of the race, nationality by place of birth, conjugal state, sex, social habits, and religion of convicts are presented in Table 28.

26.—Movement of Convicts in Penitentiaries, fiscal years 1931-38.

Schedule.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.	No.	No.	No.
In Custody, Beginnings of Years	**3,187**	**3,714**	**4,164**	**4,591**[1]	**4,220**	**3,552**	**3,097**[1]	**3,264**
Received by—								
Forfeiture of parole	8	8	6	2	11	8	12	10
Revoked paroles	19	Nil	3	Nil	4	6	Nil	Nil
Recapture	1	3	1	"	Nil	Nil	1	"
Transfer	172	145	218	179	241	180	176	246
Received from gaols, etc	1,699	1,787	2,123	1,532	1,221	1,364	1,332	1,451
Totals Received	1,899	1,943	2,351	1,713	1,477	1,558	1,521	1,707
Discharged by—								
Death	12	16	15	21	17	13	17	16
Escape	1	3	1	Nil	2[2]	Nil	1	Nil
Expiry of sentence	654	837	1,063	943	1,226	1,263	738	896
Order of the Court	1	Nil	4	5	5	2	Nil	6
Pardon	26	19	44	74	49	76	34	11
Parole	413	379	488	731	554	431	351	190
Transfer	170	150	219	228	241	182	178	246
Deportation	89	83	88[3]	80	50	45	35	18
Transfer to provincial gaol and execution	Nil	Nil	5	Nil	Nil	Nil	Nil	Nil
Return to provincial authorities	6	6	1	2	1	"	"	"
Totals Discharged	1,372	1,493	1,928	2,084	2,145	2,012	1,354	1,391[4]
In Custody, Ends of Years	**3,714**	**4,164**	**4,587**	**4,220**	**3,552**	**3,098**	**3,264**	**3,580**

[1] This discrepancy between those in custody at the end of the previous fiscal year and the beginning of this year appears in the report of the Superintendent of Penitentiaries. [2] From asylum. [3] Includes 1 by extradition. [4] Includes 8 unconditional releases.

27.—Ages of Convicts in Penitentiaries, as at Mar. 31, 1931-38.

Age Group.	1931.	1932.	1933.[1]	1934[1].	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.	No.	No.	No.
Under 20 years	484	527	467	409	325	280	317	194
From 20 to under 30 years	1,710	1,908	2,052	1,916	1,677	1,471	1,515	1,632
From 30 to under 40 years	842	970	1,027	941	861	740	806	1,008
From 40 to under 50 years	437	487	574	538	433	361	378	431
From 50 to under 60 years	173	196	257	214	167	178	174	211
60 years or over	68	76	210	202	89	68	74	104
Totals	**3,714**	**4,164**	**4,587**	**4,220**	**3,552**	**3,098**	**3,264**	**3,580**

[1] See footnote 1, Table 28.

28.—Convicts in Penitentiaries, Classified by Race, Birthplace, Religion, etc., as at Mar. 31, 1931-38.

Item.	1931.	1932.	1933.[1]	1934.[1]	1935.	1936.	1937.	1938.
	No.	No.	No.	No.	No.	No.	No.	No.
By Race—								
African	75[2]	79[2]	66[2]	50[2]	51[2]	45[2]	43[2]	58[2]
Caucasian	3,499	3,923	4,376	4,068	3,417	2,972	3,130	3,426
Indian	59	81	67	51	48	57	62	66
Mongolian	81	81	78	51	36	24	29	30
By Place of Birth—								
British—								
Canadian	2,441	2,806	2.976	2,803	2,502	2,216	2,401	2,792
English or Welsh	292	309	255	230	215	175	155	144
Irish	42	46	42	41	42	32	32	29
Scottish	118	118	102	88	79	69	80	83
Other British	30	41	33	25	20	22	23	35
Foreign—								
Austrian or Hungarian	92	90	86	74	85	73	79	67
Chinese	75	72	71	46	31	18	21	21
Italian	64	74	73	67	68	62	63	44
Russian	95	102	446	392	94	59	71	51
United States	274	307	282	232	218	181	194	144
Other foreign	191	199	221	222	198	191	145	170
By Conjugal State—								
Single	2,328	2,636	2,581	2,373	2,165	1,934	2,034	2,326
Married	1,240	1.352	1,777	1,647	1,227	1,008	1,039	1,078
Widowed	139	161	203	179	144	130	140	138
Divorced	7	15	26	21	16	26	51	38
By Sex—								
Male	3,670	4,116	4,261	3,907	3,512	3,068	3,232	3,541
Female	44	48	326	313	40	30	32	39
By Social Habits—								
Abstainers	872	1,076	1,682	1,560	999	884	873	990
Temperate	2,338	2,639	2,544	2,311	2,191	1,898	2,037	2,200
Intemperate	504	449	361	349	362	316	354	390
By Religion—								
Anglican	618	678	603	547	488	447	471	393
Baptist	169	173	168	169	172	136	129	157
Buddhist	68	61	58	34	19	4	2	3
Doukhobor	Nil	Nil	593	542	46	2	8	8
Greek Catholic	69	54	54	51	50	57	63	55
Jewish	66	89	80	83	72	53	55	61
Lutheran	83	97	96	90	75	66	87	85
Methodist	-	96[3]	82[3]	73[3]	58[3]	42[3]	34[3]	19[3]
Presbyterian	407	458	437	403	398	293	270	279
Roman Catholic	1,810	2,070	2,008	1,842	1,800	1,646	1,658	1,874
United Church	329	257	257	244	264	259	338	384
Others	95	131	151	142	110	93	149	262
Totals	**3,714**	**4,164**	**4,587**	**4,220**	**3,552**	**3,098**	**3,264**	**3,580**

---

[1] The unusually high figures for many items and the totals in 1933 and 1934 are due to the confinement of Doukhobors in the special penitentiary on Piers Island, B.C. (See p. 1070). [2] All 'coloured'.
[3] These persons returned themselves as Methodists in spite of the union with Presbyterians and Congregationalists to form the United Church of Canada in 1925.

CHAPTER XXVIII.—MISCELLANEOUS ADMINISTRATION.

Section 1.—Public Lands.

Table 1 summarizes the land area of Canada by tenure. Items 3, 4, and 5 are obtained from Dominion Government sources and Items 1, 2, and 7 from Provincial Government sources. In the majority of cases the area of provincial lands (Item 6), as calculated by balancing the figures, agrees with the area as estimated by the provincial departments concerned. Thus, any differences reported from year to year in the area of lands alienated or in process of alienation are compensated for by the adjustment of lands still remaining under the Crown in the right of the provinces concerned. The total land areas shown are the equivalents in thousands of acres of those given by provinces in square miles on pp. 8 and 27.

1.—Summary of Classification of Lands in Canada, by Tenure (*circa*) 1938.

Note.—The land area of Canada is shown classified by surface resources on p. 27.

Tenure.	P.E.I.	N.S.	N.B.	Que.	Ont.
	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.
1. Alienated, patented, granted, etc.	1,391	11,027[1]	10,501	24,881	26,000[1]
2. In process of alienation	Nil	-	332	3,758	-
3. Dominion lands other than National Parks and Indian Reserves	"	8	2	18	103
4. Dominion National Parks	5	250	Nil	Nil	7
5. Indian Reserves	2	18	37	196	1,387
6. Provincial lands, including leased lands and forest reserves, but not provincial parks	Nil	1,972	6,711	302,907	201,874
7. Proivncial parks	"	Nil	Nil	3,302	3,129
Totals, Land Area[2]	**1,398**	**13,275**	**17,583**	**335,062**	**232,500**

Tenure.	Man.	Sask.	Alta.	B.C.	Yukon and N.W.T.	Canada.
	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.
1. Alienated, patented, granted, etc.	28,046	64,461	50,917	15,434	5	232,663
2. In process of alienation	177	2,327	256	4,426	Nil	11,276[3]
3. Dominion lands other than National Parks and Indian Reserves	2	30	66	103	934,349[4]	934,681
4. Dominion National Parks	735	1,196	13,402[5]	1,098	2,320[6]	19,013
5. Indian Reserves	555	1,283	1,226	798	6	5,508
6. Provincial lands, including leased lands and forest reserves, but not provincial parks	111,108	82,657	93,364	202,877	Nil	1,003,470
7. Provincial parks	Nil	350	1	5,203	"	11,985
Totals, Land Area[2]	**140,623**	**152,304**	**159,232**	**229,939**	**936,680**	**2,218,596**

[1] Includes lands in process of alienation. [2] Estimated by the Hydrographic and Map Service, Department of Mines and Resources. [3] For the provinces indicated only. [4] In Yukon and N.W.T., areas aggregating 380,542,080 acres have been set apart by Order in Council as game preserves and sanctuaries in which only native Indians and Eskimos may hunt, but have not been permanently dedicated to this purpose by Parliament and are not, therefore, regarded as parks. [5] Includes the Wood-Buffalo Park (which, though reserved by the Dominion, is not administered as a National Park) and the Tar-Sands Reserve. [6] That portion of the Wood-Buffalo Park in the Northwest Territories.

Subsection 1.—Dominion Public Lands.*

The public lands under the administration of the Dominion Government comprise lands in the Northwest Territories, including the Arctic archipelago and the islands in Hudson strait and bay; lands in Yukon Territory; National Parks (see pp. 28-31) and historic sites; Indian reserves (see p. 1085); Ordnance and Admiralty lands; and, in general, all lands held by the several departments of the Dominion Government for various purposes connected with Dominion administration. The lands and other natural resources lying within the boundaries of the provinces of Manitoba, Saskatchewan, Alberta, and British Columbia, which had formerly been administered by the Dominion Government, were transferred in 1930 to the administration of the provinces concerned. (See p. 1019 of the 1931 Year Book.)

The great bulk of the land areas under Dominion administration are those of Yukon and Northwest Territories, amounting to about 936,680,000 acres or 42 p.c. of the land surface of Canada. In general the southern border of both Yukon and Northwest Territories is 60° N. latitude. In Europe, Oslo, Stockholm, and Leningrad are near this line, and about three-fourths of Norway, two-thirds of Sweden, all of Finland and a large proportion of Russia are north of it. This northern part of the national domain is under the administration of the Lands, Parks, and Forests Branch of the Department of Mines and Resources. The Royal Canadian Mounted Police maintain law and order throughout Yukon and Northwest Territories. More detailed particulars follow:—

The Northwest Territories.—The government of the Northwest Territories is vested in a Commissioner, a Deputy Commissioner, and a Council of five members appointed by the Governor General in Council, with Ottawa as the seat of government. The Territories are subdivided for administrative purposes into the provisional districts of Mackenzie, Keewatin, and Franklin. The District of Mackenzie is the most widely known and developed, trading posts and settlements being located all along the great stretch of inland waterways known as the Mackenzie system.

The administrative headquarters for the Mackenzie District is located at Fort Smith on the Slave river, immediately north of the Alberta-N.W.T. boundary. From this point there is uninterrupted navigation to the Arctic ocean, a distance of 1,300 miles, and along the Arctic coast as far east as King William island. When navigation conditions are favourable it is possible to effect inter-communication between the Western and Eastern Arctic through Bellot strait which separates Boothia peninsula, the most northerly tip of the mainland, from Somerset island.

The Administration provides a medical and nursing service, assists the Anglican and Roman Catholic missions in providing educational and hospital facilities, and cares for the general welfare of the population of the Territories. The population of the Territories at the time of the 1931 Census was 9,723.

Areas totalling approximately 584,050 square miles comprising many of the finest hunting grounds of the natives have been set aside as preserves wherein only resident Indians, Eskimos, and half-breeds may hunt and trap game. Included in this area is the new Mackenzie Mountains Preserve, which takes in all the land between the Mackenzie river, the Yukon boundary, and the Peel River Preserve. With a view to conserving the game in the districts not included in the game preserves, licences to hunt and trap game may, under the regulations, be issued only to:—

---

* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

1. Residents of the Northwest Territories as defined by these regulations who at the present time hold hunting and trapping licences and who continue to reside in the Northwest Territories.

2. The children of those who have had their domicile in the Northwest Territories for the past four years, provided such children continue to reside in the Northwest Territories.

The Wood-Buffalo Park in the vicinity of Fort Smith, which covers an area of 17,300 square miles (a portion of which is in Alberta), has been reserved specially for the protection of buffalo. The Thelon Game Sanctuary to the east of Great Slave lake, which was set aside primarily to aid in the conservation of musk-oxen, provides sanctuary for all species of game. Under the Northwest Game Act, musk-oxen may not be killed anywhere in the Northwest Territories.

With a view to the development of an industry which would augment the supply of wild life available as a source of food and clothing for the natives, the Dominion Government, in 1935, established a herd of reindeer on a reserve of approximately 6,600 square miles, immediately east of the Mackenzie delta. The herd has contributed to the well-being of the native population, and had increased in numbers from the original 2,370 head to more than 4,500 at the round-up in the summer of 1938. In December of that year, about 900 of the deer, the nucleus of another herd, were established under native management in a location 150 miles east of the reserve.

In view of the great increase in the use of aircraft for mail and general transportation, the Administration is developing landing facilities at many points throughout the Mackenzie District. A winter landing field has been provided at Fort Smith and others are in course of completion at Resolution, Providence, Simpson, and Norman. Floating docks, etc., have been constructed at several points for the use of seaplanes.

An excellent air-mail service is provided by the Post Office Department, while the Department of National Defence operates a system of radio stations linking up the chief settlements and mining centres of the Northwest Territories and the Yukon Territory with Edmonton, Alberta. Radio stations are in operation at Fort Smith, Resolution, Simpson, Norman, Aklavik, Port Brabant (seasonal), Port Radium, Yellowknife, Thompson Lake, Dawson, Mayo, Whitehorse, and Burwash Landing. Direction-finding and meteorological stations are operated by the Department of Transport at Chesterfield, Nottingham Island, Resolution Island, and Coppermine.

Exploratory work has been carried on throughout the Territories and much aerial surveying has been done, particularly in the mineralized areas of Mackenzie District. Mineral prospectors are exploring new areas, the aeroplane being used as the chief means of transportation. The Precambrian Shield, which has proved so rich in valuable minerals in southerly Canada, is continued into the Territories—that portion lying between Great Slave and Great Bear lakes and Hudson bay—

and valuable discoveries have been made in this area. The rich native silver and high-grade pitchblende ores discovered, during the past few years, near Great Bear lake are now under development. The oil wells near Norman on Mackenzie river have been in active operation since 1932, the bulk of the oil produced being used by mining interests operating at the eastern end of Great Bear lake. In recent years much prospecting has been carried out in the Great Slave Lake area where discoveries of gold have been reported. Active development is now in progress at many points. The agricultural land of the Territories lies almost entirely in the extension of the central plain along the Mackenzie valley.

It is known that there are many possible water-power sites throughout the Territories and certain of them may be developed as a consequence of mining enterprises. Much of the Mackenzie valley carries a forest cover that furnishes timber and fuel for local needs. Fishing, agriculture, and lumbering are engaged in to some extent, but the principal industry of the Territories is still the taking and exportation of furs, with mining rapidly increasing in importance. Many trading posts operate throughout the regions tributary to the Arctic coast, Hudson bay, and the great inland systems of waterways.

Yukon.—Yukon was created a separate Territory in June, 1898. Provision is made for a local Government composed of a chief executive classified as Controller, also an Elective Legislative Council with jurisdiction over local matters and composed of three members with a three-year tenure of office. The Controller administers the Government under instructions from the Governor General in Council or the Minister of Mines and Resources. The seat of government is at Dawson. The Territory has hospitals, schools, and other amenities of modern life, including wireless and telegraphic facilities. The population in 1931 was 4,230.

The usual route followed by travellers to the Yukon Territory is by steamer from ports on the Pacific coast to Skagway, Alaska, from that point to Whitehorse by the White Pass and Yukon railway, and thence by river boat to Dawson.

The use of aircraft for transportation purposes is increasing and landing fields have been conditioned at Dawson, Mayo, Whitehorse, and Carcross. A temporary licence has been issued for the field at Whitehorse which is becoming important through its being on the main route for international traffic. Some work has been done on emergency fields at Selkirk, Carmacks, and McQuesten.

Yukon has produced over $200,000,000 worth of gold since the Klondike rush, but the old placer claims, operated with cradle, pick, and shovel, have given place to consolidated holdings worked with hydraulic dredges and other modern machinery. The development of the silver-lead ores of the Mayo district has been one of the major factors in the growth of lode-mining enterprises. Copper, tungsten, and coal are also found in the Yukon Territory. There is a hydro-electric installation of 13,200 h.p. in Yukon, which is used to supply electric energy for placer-mining operations and for the city of Dawson.

Although fishing, agriculture (including fur farming), and some lumbering are carried on as auxiliary industries, the future of Yukon is inevitably bound up with mining development and the fur trade.

Subsection 2.—Provincial Public Lands.

In the Maritime Provinces, in Quebec, Ontario, and British Columbia (except the Railway Belt and the Peace River Block) the public lands have been administered by the Provincial Governments since Confederation. Since the transfer of the natural resources to the Prairie Provinces and British Columbia, as outlined in Chapter XXVII, p. 1019 of the 1931 Year Book, public lands in all provinces have been under provincial administration. In Prince Edward Island, all the land is alienated and there are no provincial public lands.

Those interested in securing information regarding provincial public lands are referred to the following officials of the respective provinces: Minister of Lands and Forests, Halifax, N.S.; Deputy Minister of Lands and Mines, Fredericton, N.B.; Deputy Minister of Lands and Forests, Quebec, Que.; Deputy Minister of Lands and Forests, Toronto, Ont.; Director of Lands, Department of Mines and Natural Resources, Winnipeg, Man.; Director of Lands, Department of Natural Resources, Regina, Sask.; Director of Lands, Department of Lands and Mines, Edmonton, Alta.; Deputy Minister of Lands, Victoria, B.C.

Section 2.—National Defence.

Before the outbreak of the Great War, the Canadian Militia consisted of a Permanent Force, which, on Mar. 31, 1914, numbered 3,000 officers, non-commissioned officers, and men, and an Active Militia, which at the same date numbered 5,615 officers and 68,991 non-commissioned officers and men. After the outbreak of War on Aug. 4, 1914, successive contingents of troops of all arms were recruited, equipped, trained, and dispatched by the Dominion Government to England for active service. When hostilities ceased on Nov. 11, 1918, there had been sent overseas, for active service in the Canadian Expeditionary Force, about 418,000 officers, non-commissioned officers, and men.* In addition to these, several thousand Canadians served with the Royal Air Force.

Organization.—Prior to 1922, three departments of the Canadian Government were concerned with the defence of Canada, *viz.*, the Department of Militia and Defence, the Department of the Naval Service, and the Air Board.

During the session of 1922, the National Defence Act was passed, consolidating the Department of Militia and Defence, the Department of the Naval Service, and the Air Board into the Department of National Defence. This Act became effective by proclamation on Jan. 1, 1923. Under it, there is a Minister of National Defence and a Deputy Minister of National Defence. To advise the Minister, a Defence Council has been constituted by Order in Council, consisting of a President (the Minister), a Vice-President (the Deputy Minister), and the following members: the Chief of the General Staff, the Chief of the Naval Staff, and the Chief of the Air Staff. The Adjutant-General, the Quartermaster-General, the Master-General of the Ordnance, and the Judge Advocate-General, are associate members. There is also a Secretary of the Council.

Subsection 1.—The Naval Service.

The Naval Service of Canada was established by the Naval Service Act, 1910 (9-10 Edw. VII, c. 43), the main provisions of which are described in the 1910 Year Book, pp. xxvi-xxix.

---

* For the detailed expenditures of the Dominion Government on account of War appropriations in the fiscal years 1915-21, see the Canada Year Book, 1921, p. 798.

The Royal Canadian Navy and its Reserve Forces are under the direction of the Chief of the Naval Staff, who is a member of the Defence Council. The Service consists of:—

1. Royal Canadian Navy (permanent).
2. Royal Canadian Naval Reserve (non-permanent).
3. Royal Canadian Naval Volunteer Reserve (non-permanent).
4. Royal Canadian Fleet Reserve (non-permanent).

Administrative and operational staff for all four Forces is provided from the Royal Canadian Navy.

The Royal Canadian Navy.—The Royal Canadian Navy has an authorized complement of 150 officers and 1,822 ratings. A large majority of the men of the R.C.N. are serving under 7-year engagements. A small proportion consists of specialist gunnery, torpedo, and engine-room ratings, lent from the Royal Navy. (On Apr. 1, 1938, there were 4 Royal Navy officers and 2 Royal Navy ratings on loan to the Royal Canadian Navy.)

A proportion of the officers of the Royal Canadian Navy serve periodically in ships of the Royal Navy, to acquire experience in capital ships, cruisers, etc., and training courses are arranged for selected officers at the instructional schools of the Royal Navy to qualify in war staff, gunnery, torpedo, wireless, and other duties. Courses for selected men in the gunnery, torpedo, wireless telegraphy, and mechanical training schools of the Royal Navy are similarly arranged.

The ships of the Royal Canadian Navy are:—

H.M.C.S. *Saguenay* (destroyer—in commission).
H.M.C.S. *Skeena* (destroyer—in commission).
H.M.C.S. *St. Laurent* (destroyer—in commission).
H.M.C.S. *Fraser* (destroyer—in commission).
H.M.C.S. *Ottawa* (destroyer—in commission).
H.M.C.S. *Restigouche* (destroyer—in commission).
H.M.C.S. *Armentières* (minesweeper—in commission).
H.M.C.S. *Gaspe* (minesweeper—in commission).
H.M.C.S. *Fundy* (minesweeper—in commission).
H.M.C.S. *Nootka* (minesweeper—in commission).
H.M.C.S. *Comox* (minesweeper—in commission).
H.M.C.S. *Venture* (training schooner—in commission).
H.M.C.S. *Skidegate* (motorship—in commission).
H.M.C.S. *Glencairn* (auxiliary ketch).

Naval training establishments comprising: naval barracks; gunnery drill sheds, with all modern appliances for teaching gun-laying, sight-setting, etc.; torpedo and electrical schools; parade grounds, and other equipment are maintained at Halifax and Esquimalt. Naval dockyards, with workshops, etc., for refitting and supplying necessary stores to H.M.C. ships, are also maintained at Halifax and Esquimalt.

Royal Canadian Naval Reserve.—The establishment of the Royal Canadian Naval Reserve is 70 officers and 430 men recruited from among sea-faring personnel. Officers have been appointed to act as registrars at Halifax, Charlottetown, Quebec, Montreal, and Vancouver.

Officers and men of the Royal Canadian Naval Reserve attend naval training at Halifax and Esquimalt for 42 days for the first year of enrolment and for 14 days annually or biennially thereafter. They are permitted to volunteer for service afloat up to a maximum of six months during each period of enrolment. The period of enrolment in the Royal Canadian Naval Reserve is five years.

The R.C.N.R. Fishermen's Reserve, comprising 40 skippers and 160 seamen, is established on the Pacific coast of Canada.

Royal Canadian Naval Volunteer Reserve.—The establishment of the Royal Canadian Naval Volunteer Reserve is 138 List "A" officers, 26 instructors, and 1,652 ratings, distributed as follows: Halifax, Saint John, Charlottetown, Quebec, Montreal, Ottawa, Toronto, London, Hamilton, Port Arthur, Winnipeg, Saskatoon, Regina, Edmonton, Calgary, Vancouver, Prince Rupert. An additional Division is in process of establishment.

Each Division is under the immediate command of an officer of the R.C.N.V.R., appointed as commanding officer. The commanding officer is assisted by other commissioned officers of the Force.

A petty officer instructor (a highly qualified ex-petty officer of the Royal Navy or of the Royal Canadian Navy) is employed at each Division to give instruction to men of the Division in gunnery, torpedo practice, seamanship, and other naval subjects.

Each List "A" officer and man of the R.C.N.V.R. performs annually a minimum of 30 drills, of a duration of not less than one hour each, at Division headquarters. In actual practice 40 to 50 drills have been performed annually by each member of the R.C.N.V.R. Officers and men also attend from two to three weeks naval training annually at the naval bases at Halifax or Esquimalt, or at sea in H.M.C. or H.M. ships.

Officers and men who can obtain the necessary leave of absence are permitted to perform a maximum of four months voluntary service during each period of enrolment, and a large number have availed themselves of this opportunity of gaining extended naval experience under sea-going conditions. The period of enrolment and of re-enrolment in the R.C.N.V.R. is three years.

Subsection 2.—Military Forces.

The Militia of Canada is constituted by the Militia Act. The Active Militia is divided into the Permanent and the Non-Permanent Militia.

Permanent Active Militia.—The Permanent Force consists of the following units:—

CAVALRY.—The Royal Canadian Dragoons; Lord Strathcona's Horse (Royal Canadians).

ARTILLERY.—The Royal Canadian Horse Artillery Brigade ("A", "B", and "C" Batteries); Royal Canadian Artillery (Nos. 1, 2, and 5 Heavy Batteries, No. 3 Medium Battery, and No. 4 Anti-Aircraft Battery).

ENGINEERS.—Royal Canadian Engineers (13 detachments and 1 field company).

SIGNALS.—The Royal Canadian Corps of Signals.

INFANTRY.—The Royal Canadian Regiment; Princess Patricia's Canadian Light Infantry; The Royal 22è Regiment (a French-Canadian regiment).

ARMY SERVICE CORPS.—The Royal Canadian Army Service Corps (12 detachments and training centre).

MEDICAL CORPS.—The Royal Canadian Army Medical Corps (15 detachments).

VETERINARY CORPS.—The Royal Canadian Army Veterinary Corps (4 detachments).

ORDNANCE CORPS.—The Royal Canadian Ordnance Corps (12 detachments).

PAY CORPS.—The Royal Canadian Army Pay Corps (13 detachments).

MILITARY CLERKS.—The Corps of Military Staff Clerks (12 detachments).

The strength of the Permanent Active Militia is limited by the Militia Act to 10,000, but at present the limited establishment is less than 4,300.

Schools of Instruction.—The Canadian Small Arms School is the only school which is an independent unit of the Permanent Force, but at all stations of the Permanent Force in Canada, Royal Schools of Instruction are conducted.

The Canadian Armoured Fighting Vehicles School situated at Camp Borden is conducted by personnel of the Permanent Active Militia; the purpose of this school is the instruction of personnel of both the Permanent and Non-Permanent Active Militia of Canada in the use and maintenance of mechanized equipment.

Non-Permanent Active Militia.—The Non-Permanent Active Militia consists of:—

Cavalry.—
20 Regiments of Cavalry,
Cavalry (Armoured Car), and
Cavalry (Mechanized).

Artillery.—
103 Field Batteries.
20 Medium Batteries.
10 Heavy Batteries.
4 Anti-Aircraft Batteries.
1 Light Anti-Aircraft Battery.
1 Survey Company.

Engineers.—
1 Field Squadron.
17 Field Companies.
6 Field Park Companies.
9 Army Troops Companies.
1 Electrical and Mechanical Company.
1 Workshop and Park Company.
2 Anti-Aircraft Companies.
2 Corps Field Survey Companies.
2 Fortress Companies.

Signals.—
7 Cavalry Signal Troops.
2 Armoured Car Regiment Signal Troops.
4 Divisional Signals.
7 District Signals.
2 Corps Signals.
10 Cable, Wireless, etc., Sections.
2 Fortress Signal Companies.

Canadian Officers Training Corps.—
22 Contingents.

Infantry.—
59 Battalions (rifle).
26 Battalions (machine-gun).
6 Battalions (tank).

Army Service Corps.—
1 Cavalry Divisional R.C.A.S.C.
6 Divisional R.C.A.S.C.
2 Corps Troops R.C.A.S.C.
2 Corps Ammunition Parks.
2 Pontoon Bridge Parks.
1 Reserve Mechanical Transport Company.
1 Advance Horse Transport Depot.
2 Railhead Supply Detachments.
1 Mechanical Transport Vehicle Reception Depot.
2 Composite Companies.

Medical Corps.—
2 Cavalry Field Ambulances.
22 Field Ambulances.
1 Cavalry Field Hygiene Section.
11 Field Hygiene Sections.
6 Casualty Clearing Stations.

Dental Corps.—
General List.

Veterinary Corps.—
1 Veterinary Hospital.
2 Cavalry Mobile Veterinary Sections.
7 Mobile Veterinary Sections.
1 Veterinary Evacuating Station.

Ordnance Corps.—
6 Army Field Workshops.
1 Ordnance Workshop Company.
1 Ordnance Store Company.
1 Anti-Aircraft Group Workshop.
1 Ordnance Ammunition Company.
1 Cavalry Divisional Ordnance Workshop.
11 District Store Sections.

Postal Corps.—
1 Base Post Office.
11 Postal Units.

The total establishment of the Non-Permanent Militia is 7,117 officers and 79,193 other ranks, a total of 86,310, distributed as shown in the following table.

2.—Permanent and Non-Permanent Active Militia in Canada, 1938.

Arm of Service.	Permanent Active Militia.		Non-Permanent Active Militia.	
	Personnel.	Horses.	Personnel.	Horses.
Staff and General List	71	Nil	Nil	Nil
Cavalry	444	323	8,141	4,840
Field Batteries of Artillery	389	Nil	9,976	Nil
Medium Batteries of Artillery	57	"	2,155	"
Heavy Batteries of Artillery and Anti-Aircraft	302	4	1,924	"
Engineers	296	Nil	4,860	"
Signals	422	"	4,008	"
Officers' Training Corps	Nil	"	4,553	"
Infantry	997	27	42,721	"
Army Service Corps	300	Nil	1,535	"
Non-Combatants	990	"	6,435	4
Totals	**4,268**	**354**	**86,308**	**4,844**

Reserve Militia.—In addition to the Active Militia, there is also the Reserve Militia—a framework designed to serve as a basis for contingent military organization. Drill and training are voluntary and entail no expense to the public.

The reserves of the Active Militia, as distinguished from the Reserve Militia mentioned above, comprise:—

(*a*) The Reserve of Officers (general list).
(*b*) Reserve Regimental Depots.
(*c*) Corps Reserves and Corps Reserve Lists of the Non-Permanent Active Militia consisting of qualified officers who are permitted to withdraw from the training establishment of Corps of the Non-Permanent Active Militia.
(*d*) Certain Reserve units of the R.C.A.M.C. (N.P.)—"General Hospitals" and "Motor Ambulance Convoys".

Military Districts.—For the command, training, and administration of the Canadian Militia, Canada is divided into 11 military districts, each under a District Officer Commanding, assisted by a district staff.

Militia Appropriations.—The appropriations for the Militia for the six fiscal years ended Mar. 31, 1934-39, are shown at p. 1045 of the 1938 Year Book. For the fiscal year 1940 they amounted to $21,836,500. Actual expenditures of the Department of National Defence, by Services, for the 5 latest fiscal years will be found in Table **3** of the Public Finance Chapter of this volume, at p. 879.

Subsection 3.—Air Force.

The Royal Canadian Air Force is comprised of the Permanent Active Air Force, the Auxiliary Active Air Force, and a Reserve of Officers. The Royal Canadian Air Force administers and controls all military air operations and certain air operations for civil government departments. The duties of the Royal Canadian Air Force are as follows:—

(*a*) To organize, train, and maintain an air force for the defence of Canada.
(*b*) The conduct of limited flying operations (chiefly photography) for civil government departments when the exigencies of the service permit.

Permanent Active Air Force commands, stations, and units are located as follows:—

R.C.A.F. Headquarters, Ottawa, Ont.

R.C.A.F. Record Office, Ottawa, Ont.

Western Air Command Headquarters, Vancouver, B.C.
- R.C.A.F. Station Headquarters, Vancouver, B.C.
  - No. 4 (General Reconnaissance) Squadron.
  - No. 6 (Torpedo Bomber) Squadron.
  - No. 9 (General Reconnaissance) Squadron.
- No. 2 Equipment Depot, Winnipeg, Man.
- No. 3 Repair Depot, Vancouver, B.C.
- No. 1 (Fighter) Squadron, Calgary, Alta.
- No. 3 (Bomber) Squadron, Calgary, Alta.
- No. 13 Technical Detachment, Vancouver, B.C.
- No. 21 Magazine Detachment, Kamloops, B.C.
- No. 111 P.F. Detachment, Vancouver, B.C.
- No. 112 P.F. Detachment, Winnipeg, Man.
- No. 113 P.F. Detachment, Calgary, Alta.
- No. 120 P.F. Detachment, Regina, Sask.

Air Training Command Headquarters, Toronto, Ont.
- R.C.A.F. Station Headquarters, Trenton, Ont.
  - Advanced Training Wing Headquarters.
  - Advanced Training Squadron.
  - Advanced Ground Instructional School.
  - No. 1 Technical Training School.
  - Air Armament School.
  - Air Navigation and Seaplane School.
  - Wireless School.
  - Equipment Training School.
  - No. 2 (Army Co-operation) Squadron.
- R.C.A.F. Station Headquarters, Camp Borden, Ont.
  - Intermediate Training Wing Headquarters.
  - Intermediate Training Squadron.
  - Intermediate Ground Instructional School.
  - No. 2 Technical Training School.
- No. 12 Technical Detachment, Toronto, Ont.
- No. 110 P.F. Detachment, Toronto, Ont.
- No. 114 P.F. Detachment, London, Ont.
- No. 119 P.F. Detachment, Hamilton, Ont.

Eastern Air Command Headquarters, Halifax, N.S.
- R.C.A.F. Station Headquarters, Dartmouth, N.S.
- No. 5 (General Reconnaissance) Squadron.
- No. 4 Repair Depot, Dartmouth, N.S.
- No. 22 Magazine Detachment, Debert, N.S.
- No. 116 P.F. Detachment, Halifax, N.S.
- No. 117 P.F. Detachment, Saint John, N.B.

R.C.A.F. Station Headquarters, Ottawa, Ont.
- R.C.A.F. Photographic Establishment.
- Test and Development Flight.
- No. 7 (General Purpose) Squadron.
- No. 8 (General Purpose) Squadron.

No. 1 Aircraft Depot, Ottawa, Ont.

No. 11 Technical Detachment, Montreal, Que.*
No. 115 P.F. Detachment, Montreal, Que.†
No. 118 P.F. Detachment, Montreal, Que.†

---

* Under Military District No. 4, Montreal, Que., for administration of personnel only. Directly under Air Force Headquarters for all other purposes.

† Administered through Military District No. 4, Montreal, Que.

Auxiliary Active Air Force units are located as follows:—

Administered by Western Air Command Headquarters:
No. 100 Wing Headquarters, Vancouver, B.C.
No. 111 (Coast Artillery Co-operation) Squadron, Vancouver, B.C.
No. 112 (Army Co-operation) Squadron, Winnipeg, Man.
No. 113 (Fighter) Squadron, Calgary, Alta.
No. 120 (Bomber) Squadron, Regina, Sask.

Administered by Air Training Command Headquarters:
No. 101 Wing Headquarters, Toronto, Ont.
No. 110 (City of Toronto) (Army Co-operation) Squadron, Toronto.
No. 114 (Bomber) Squadron, London, Ont.

Administered by Air Training Command Headquarters:—*concluded.*
No. 119 (Bomber) Squadron, Hamilton, Ont.

Administered by Eastern Air Command Headquarters:
No. 116 (Fighter) Squadron, Halifax, N.S.
No. 117 (Coast Artillery Co-operation) Squadron, Saint John.

Administered by Military District No. 4, Montreal, Que.:
No. 102 Wing Headquarters, Montreal, Que.
No. 115 (Fighter) Squadron, Montreal, Que.
No. 118 (Bomber) Squadron, Montreal, Que.

The strength of the Royal Canadian Air Force on Mar. 31, 1939, was:—

	Officers.	Airmen.
Permanent Active Air Force	261	1,930
Auxiliary Active Air Force	99	867
Reserve of Officers	156	-

Subsection 4.—The Royal Military College.

The Royal Military College of Canada, situated at Kingston, Ont., was founded in 1876 for the purpose of giving Gentlemen Cadets the moral, mental, and physical training necessary for commissioned ranks in the Army, and also for qualifying officers for command and for staff appointments. Subsequently the scope of the course was adjusted to prepare Gentlemen Cadets not only for the Army but also for the Navy and Air Force.

The Gentlemen Cadets are given a four-year course in engineering and military training. The first three years is devoted to a common course in the basic subjects for general engineering. In the fourth year, the Gentlemen Cadets are permitted to make a choice of one of the following optional courses: general, civil engineering, mechanical engineering, electrical engineering, chemical engineering, mining and metallurgic engineering.

The educational requirement for admission is junior matriculation for any recognized Canadian university or an acceptable equivalent. Candidates for admission are also required to be of good moral character and to pass a rigid medical and physical examination.

The total cost of the course for the four years is approximately $1,500, which sum includes board and lodgings, and the cost of uniforms and educational supplies.

The number of Gentlemen Cadets who may be in attendance during any year is restricted by Order-in-Council to two hundred. The vacancies to be filled each year are allotted to the provinces in the same ratio as their respective populations bear to the population of Canada. Vacancies are filled in order of merit based on educational and physical qualifications.

Applications for admission must be submitted to the Secretary, Department of National Defence, Ottawa, not later than May 31, preceding date of entry.

A more extended reference to the activities of the College is given at pp. 1047-1048 of the 1938 Year Book.

Section 3.—Department of Public Works.*

Since Confederation and before, the constructing department of the Dominion Government has been known as the Department of Public Works. In 1879 the railways and canals were placed under the control of a new department, the building and maintenance of penitentiaries were transferred to the Department of Justice, the maintenance and construction of lighthouses to the Marine and Fisheries Department, and the smaller drill halls and armouries to the Department of National Defence. The work of the Department of Public Works is now divided into three principal branches, *viz.*, the Engineering Branch, the Architect's Branch, and the Telegraph Branch.

Engineering.—The Engineering Branch conducts the construction and repair of wharves, piers, breakwaters, dams, weirs, bank and beach protection works; the improvement of harbours and rivers by dredging; the construction, operation, and maintenance of dredging plant and the construction, operation, and maintenance of graving or dry docks; the construction and maintenance of interprovincial bridges and approaches thereto, also the construction, operation, and maintenance of bridges with movable spans on certain highways; hydrographical and topographical surveys which are required for the preparation of plans, reports, and estimates; test borings for the purpose of ascertaining the nature of foundations; the testing of cements and materials of construction; the licensing of international and interprovincial ferries, and the control of works constructed in or over navigable waters by authority of the Navigable Waters Protection Act (R.S.C., 1927, c. 140).

Architecture.—The Architect's Branch constructs and maintains Government buildings, post offices, customs houses, examining warehouses, quarantine stations, immigration and experimental farm buildings, military hospitals, and telegraph offices. It also constructs armouries and drill halls and leases office accommodation as required for the various Departments.

Telegraphs.—The Telegraph Branch has control of the construction, operation, and maintenance of all Government-owned telegraph lines and cables. These lines are located in the provinces of Nova Scotia, New Brunswick, Quebec, Ontario, Saskatchewan, Alberta, British Columbia, and Yukon (see also p. 714).

Graving Docks.—The Department constructed five dry docks and is responsible for subsidies under the Dry Dock Subsidies Act, 1910 (9-10 Edw. VII, c. 17). A description of these docks is given in the Transportation Chapter, p. 679.

Revenues and Expenditures.—Details of gross revenues and expenditures, formerly published in this Section, may be obtained from the Annual Report of the Department. Net revenues and expenditures for this as well as all other branches of Government are available in the Public Finance chapter of this volume.

Section 4.—The Indians and Eskimos of Canada.

Subsection 1.—The Indians of Canada.†

The Indians of Canada whose affairs are administered by the Department of Mines and Resources, Indian Affairs Branch, number about 112,510 (according to a departmental census taken in 1934), their numbers varying slightly from year to year. A small yearly increase is evident, and the popular notion that the race is disappearing is not in accordance with facts. Before they were subjected to the degenerating effects of European civilization and the devastating results of the many colonial wars, the numbers of the Indians were undoubtedly larger, but any reliable information as to the aboriginal population during either the French or the early British *régime* is non-existent, and there is no adequate basis for a comparison between the past and present aboriginal populations. An interesting sketch of the progress of the Indians of Canada since Confederation will be found in the Report of the Department of Indian Affairs, 1927.

---

* Revised by J. M. Somerville, Secretary, Department of Public Works.

† Revised by T. R. L. MacInnes, Secretary, Indian Affairs Branch, Department of Mines and Resources.

Administration.*—Reserves have been set aside for the various bands of Indians throughout the Dominion, and the Indians located thereon are under the supervision of the local agents of the Department. The activities of the Department as guardian of the Indians, include the control of Indian education and health, the development of agriculture and other pursuits among them, the administration of their lands, community funds, estates, and the general supervision of their welfare.

The local administration of the Indian bands on the reserves scattered throughout the Dominion is conducted through the Department's agencies, of which there are in all 113. The number of bands included in an agency varies from one to more than 30. The staff of an agency usually includes various officers in addition to the agent, such as medical officer, clerk, farm instructor, field matron, constable, stockman, etc., according to the special requirements of the agency in question. The work of the agencies is supervised by the Department's inspectors, each inspector having charge of a certain number of agencies. Expenditures upon destitute Indians are made by the Dominion Government, either from public funds or from tribal funds of the Indians themselves.

The Indian Act provides for the enfranchisement of Indians. When an Indian is enfranchised he ceases to be an Indian under the law and acquires the full status of citizenship. In the older provinces, where the Indians have been longer in contact with civilization, many are becoming enfranchised. Great discretion, however, is exercised by the Government in dealing with this problem, as Indians who become enfranchised lose the special protection attached to their wardship, so that it is necessary to guard against premature enfranchisement.

Treaties.—In the older eastern provinces, the history of the Indians has been one of slow development with that of the community. In western Ontario, the Prairie Provinces, and the Territories the situation has been different. There, the rapid spread of civilization made it necessary to take prompt and effective measures to protect the moral claims of the Indians, which are recognized by the Government. Accordingly, treaties were entered into with the Indians, whereby the latter ceded to the Crown their aboriginal title and interest in the country. In consideration of such cession the Crown agreed to set aside adequate reserves, make cash grants, provide per capita annuities, give assistance in agriculture, stock-raising, hunting, trapping, etc., as particular circumstances might require, provide education for the Indian children, and otherwise safeguard the Indians' interests. These treaties have been made from time to time as occasion arose and as new territories were opened up. No treaty has been made with the Indians of British Columbia, except in the Peace River Block, but their welfare has received no less attention from the Government on that account.

Government Expenditure.—On Mar. 31, 1938, the capital of the Indian Trust Fund, which a year earlier had amounted to $13,997,644, had increased to $14,081,905. The amounts expended from the Consolidated Revenue Fund were as follows: voted by Parliament for the purposes of the Department, $4,775,646; annuities by statute, $252,644; and special supplementary, $116,784.

---

* For an outline of the early administration, see p. 937 of the 1932 Year Book.

Statistics.—Statistical tables of population, school attendance, income, and agricultural activities of the Indians in Canada follow. In Table **3** the populations for 1871-1931 are compiled from reports of the various censuses since Confederation, while the statistics and other information in the remaining tables are taken from the last Annual Report of the Indian Affairs Branch of the Department of Mines and Resources. The Branch takes a quinquennial census of Indians under its control, whereas census figures include all persons of Indian origin. The quinquennial census taken by the Branch in 1934 showed a total of 112,510 as compared with 108,012 in 1929 and 104,894 in 1924, an increase of 7·3 p.c. in ten years. The details of the Census of 1934 are given in the Annual Report of the Department for that year. The figures of the decennial census include some thousands of persons of Indian race who are not on the reserves but are living as ordinary citizens of Canada.

3.—Indian Population of Canada at the Decennial Censuses of 1871-1931.

Province or Territory.	1871.[1]	1881.[1]	1891.[2]	1901.	1911.	1921.	1931.
Prince Edward Island	323	281	314	258	248	235	233
Nova Scotia	1,666	2,125	2,076	1,629	1,915	2,048	2,191
New Brunswick	1,403	1,401	1,521	1,465	1,541	1,331	1,685
Quebec	6,988	7,515	13,361	10,142	9,993	11,566	12,312
Ontario	12,978	15,325	17,915	24,674	23,044	26,436	30,368
British Columbia	23,000	25,661	34,202	28,949	20,134	22,377	24,599
Manitoba	56,000	56,239	51,249	16,277	7,876	13,869	15,417
Saskatchewan				26,304	11,718	12,914	15,268
Alberta					11,630	14,557	15,258
Yukon				3,322	1,489	1,390	1,543
Northwest Territories				14,921	15,904	3,873[3]	4,046
Totals	**102,358**	**108,547**	**120,638**	**127,941**[4]	**105,492**	**110,596**	**122,920**

[1] Census figures in the organized provinces and estimates for the rest of Canada.

[2] Racial origin not taken in 1891; the figures have been taken from the report of the Department of Indian Affairs of that year.

[3] The decrease in the Indian population of the Northwest Territories is due to the extension of the boundaries of Quebec, Ontario, and Manitoba in 1912. This also accounts for the increase in the 1921 Indian population of these provinces.

[4] Includes 34,481 'half-breeds'.

Indian Education.—The educational work of the Department is now very extensive. In the fiscal year ended Mar. 31, 1938, a total of 367 Indian schools were in operation, including 80 residential schools for Indians with an enrolment of 9,233, and 277 day schools for Indians with an enrolment of 9,309 Indian pupils, also 10 combined public and Indian schools, with 201 Indian pupils enrolled. The total enrolment in the Indian schools has increased from 12,799 in 1915-16 to 18,743 in 1937-38 and the average attendance from 8,080 to 14,099 or from 63·1 p.c. to 75·2 p.c. of the enrolment. Continuation and high school work is now being taught in several of the day and residential schools. The amount spent on Indian education in the fiscal year ended Mar. 31, 1938, was $1,830,071.

4.—Enrolment and Average Attendance of Pupils at Indian Schools, fiscal years 1916-38.

Fiscal Year.	Residential Schools.		Day Schools.		All Schools.		
	Enrolment.	Average Attendance.	Enrolment.	Average Attendance.	Enrolment.	Attendance.	
						Number.	Per cent of Enrolment.
1916	4,661	4,029	8,138	4,051	12,799	8.080	63·1
1917	4,520	4,149	7,658	4,136	12,178	8,285	68·0
1918	4,692	4,081	7,721	3,797	12,413	7,878	63·5
1919	4,640	4,014	7,312	3,587	11,952	7,601	63·6
1920	4,719	4,133	7,477	3,516	12,196	7.649	62·7
1921	4,783	4,143	7,775	3,931	12,558	8,074	64·3
1922	5,031	4,360	7,990	4,308	13,021	8,668	66·6
1923	5,347	4,695	8,376	4,411	13,723	9,106	66·4
1924	5,673	4,856	8,199	4,332	13,872	9,188	66·2
1925	6,031	5,278	8,191	4,601	14,222	9,879	69·5
1926	6,327	5,658	8,455	4,940	14,782	10,598	71·7
1927	6,641	5,881	8,069	4,660	14,710	10,541	71·7
1928	6,795	6,043	8,223	4,823	15,018	10,866	72·4
1929	7,075	6,282	8,272	4,976	15,347	11,258	73·4
1930	7,302	6,476	8,441	5,103	15,743	11,579	73·6
1931	7,831	6,917	8,584	5,314	16,415	12,231	74·5
1932	8,213	7,400	8,950	5,707	17,163	13,107	76·4
1933	8,465	7,613	8,960	5,874	17,425	13,487	77·4
1934	8,596	7,760	8,852	5,592	17,448	13,352	76·5
1935	8,709	7,882	8,851	5,560	17,560	13,442	76·5
1936	8,906	8,061	9,127	5,788	18,033	13,849	76·8
1937	9,040	8,176	9,257	5,790	18,297	13,966	76·3
1938	9,233	8,121	9,510	5,978	18,743	14,099	75·2

Economic Data.—Statistical information concerning the economic position of the Indians of Canada, including: acreages and value of Indian lands, by provinces; and sources and values of income of Indians, by provinces, will be found in Tables 5 and 6, which follow. Statistics relating to the agricultural and stock-raising activities of the Indians, and to the value of their real estate and personal effects, will be found in the Annual Report of the Department of Mines and Resources.

5.—Acreages (Classified) and Value of Indian Lands, by Provinces, as at Mar, 31, 1938.

Province.	Total Area of Reserves.	Area under Wood.	Lands Cleared but not under Cultivation.	Lands under Cultivation.	Value of Lands.
	acres.	acres.	acres.	acres.	$
Prince Edward Island	1,508	1,397	23	88	3,600
Nova Scotia	18,325	15,174	2,588	563	81,805
New Brunswick	37,404	35,591	1,501	312	74,478
Quebec	195,528	166,417	20,207	8,904	1,419,235
Ontario	1,387,492	1,233,066	106,500	47,926	4,463,211
Manitoba	554,605	364,226	181,889	8,490	2,814,964
Saskatchewan	1,283,311	518,890	731,677	32,744	13,714,878
Alberta	1,225,710	346,132	817,704	61,874	16,283,280
British Columbia	798,523	474,755	284,095	39,673	13,551,801
Yukon and N.W.T.	5,474	5,296	108	70	9,878
Totals	**5,507,880**	**3,160,944**	**2,146,292**	**200,644**	**52,417,130**

6.—Values and Sources of Income of Indians, by Provinces, calendar year 1937.

Province.	Value Received from—					Wages Earned.	Total Income of Indians.[1]
	Farm Products, Including Hay.	Beef Sold or Used for Food.	Fishing.	Hunting and Trapping.	Other Industries.		
	$	$	$	$	$	$	$
Prince Edward Island	800	175	375	160	425	1,300	3,235
Nova Scotia	8,914	645	1,275	2,605	11,140	19,745	46,373
New Brunswick	6,445	350	1,265	1,380	4,130	16,300	33.224
Quebec	70,571	8,350	2,360	51,165	25,160	135,220	333,601
Ontario	377,835	21,085	217,291	263,460	159,419	452.481	1,936.984
Manitoba	131,854	18,714	33,615	140,950	39,100	62.975	526,074
Saskatchewan	225,920	67,897	24,830	54,779	34,837	37,077	602,467
Alberta	266,258	82,449	12,150	81,176	51,596	36,620	796,920
British Columbia	368,775	90,768	432.905	143,179	152,050	422,314	1,742,959
Yukon and N.W.T.	13,284	73	21,940	131.470	6,790	18,260	210,788
Totals	**1,470,656**	**290,596**	**748,006**	**870,324**	**484,647**	**1,202,292**	**6,232,625**

[1] Includes income received from timber and mining dues and from annuities earned as interest on Indian trust funds, but does not include money received from land rentals for which figures are not available by provinces.

Subsection 2.—The Eskimos of Canada.*

The Eskimos of Canada are found principally on the northern and Hudson Bay coasts of the mainland and on islands in the Arctic archipelago and in Hudson bay, although in the Baker Lake-Chesterfield Inlet area on the west side of Hudson bay there are bands of Eskimos who are essentially an inland people, and who subsist chiefly on caribou. The diet of the coast Eskimos is largely marine mammals and fish, varied at times by caribou obtained from the interior during the seasonal migrations of these animals. The skins of the caribou are used for winter clothing.

The wandering life of the Eskimos and the vast area over which they are scattered present great difficulties in ascertaining their exact numbers. The total for the entire Dominion, according to the latest returns, is about 6,000, located mainly in the Northwest Territories, with approximately 1,590 in Quebec, 85 in Yukon Territory, 62 in Manitoba, and 3 in Alberta.

The administrative care of Eskimos outside of the organized provinces devolves upon the Department of Mines and Resources which, by regulative measures (including the setting aside of game preserves where only natives may hunt and the establishment of a reindeer herd), conserves the natural resources necessary to their subsistence. Contact with the Eskimos is maintained through permanent stations (at a number of which medical officers are located), in the Eastern, Central, and Western Arctic, by patrols of the Royal Canadian Mounted Police, and by means of the annual Canadian Eastern Arctic Patrol by steamship.

Section 5.—Pensions and other Provision for War Veterans.†

Pensions Section.—This Section is responsible for the administration of returned soldiers' affairs under the Department of Pensions and National Health Act, the War Veterans' Allowance Act, and the Veterans' Assistance Commission

---

* Prepared under the direction of R. A. Gibson, Director, Lands, Parks, and Forests Branch, Department of Mines and Resources, Ottawa.

† Revised by F. H. Brown, Assistant Secretary, Department of Pensions and National Health. See also the 1930 Year Book, pp. 982-983.

Act. It is also responsible, by direction of the Canadian Pension Commission, for certain administrative duties under the Pension Act and the Returned Soldiers' Insurance Act. The Representative of the Treasury is responsible for all payments under these Acts.

The Annual Report for the fiscal year ended Mar. 31, 1938, shows a decrease from the previous year in the number of ex-members of the Forces who received in-patient hospital treatment, the number being 11,443 as against 11,742 in 1936-37, and 12,835 in 1935-36. The Department maintains eight hospitals, situated in the following centres: Halifax, Saint John, Ste. Anne de Bellevue, Toronto, London, Winnipeg, Calgary, and Vancouver. A sheltered employment workshop is operated at Montreal and one shop by the Red Cross Society at Victoria.

One of the features of the activities of the Department is provision in a departmental institution for pensioners who, through age or infirmity, are unable to care for themselves. The number of such cases showed an increase during the year, the total on Mar. 31, 1938, being 377 as against 299 a year previously, 286 in 1936, and 235 in 1935. In the issue of orthopædic and surgical appliances there has been a slight decrease. The number of pensioners who were granted relief was 11,179 in 1937-38, as compared with 12,322, in 1936-37, and 12,083 in 1935-36. The expenditure on relief in 1937-38 was $2,232,398; in 1936-37, $2,435,285; and in 1935-36, $2,365,579.

The provision under which the Department assumes responsibility in respect of accidents sustained by pensioners of 25 p.c. and upwards when engaged in industry has been continued. During the fiscal year under review, the number of claims was 317; in 1936-37, 260; in 1935-36, 279; and in 1934-35, 222. Expenditures were as follows: 1937-38, $39,997; 1936-37, $18,590; and 1935-36, $27,138. Expenditures are largely governed by the number of fatal and serious accidents.

The following is a summary statement of the manner in which the funds appropriated by Parliament have been dealt with; the costs of administration and of the adjudication of pensions are also shown.

NET PAYMENTS BY THE PENSIONS BRANCH OF THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH, FISCAL YEAR 1938.

Net Cash Payments—		
European War pensions	$ 40,774,881	
War veterans' allowances	3,903,007	
Unemployment assistance	2,232,398	
Sheltered employment	57,879	
Hospital allowances	943,431	
Probational training allowances	67,209	
		$ 47,978,805
Net Cost of Services (Indirect Payments to and on behalf of Ex-members of the Forces and their Dependants)—		
Hospital treatment	$ 2,754,776	
Employers' liability compensation	39,997	
Last Post Fund	60,000	
Canadian Legion	9,000	
Transportation of pensioners, patients, etc	71,018	
After-care of the blind and transportation of blinded ex-soldiers	6,094	
		$ 2,940,885

NET PAYMENTS BY THE PENSIONS BRANCH OF THE DEPARTMENT OF PENSIONS AND NATIONAL HEALTH, FISCAL YEAR 1938—concluded.

Other Expenditures (Including Payment of Militia, Statute, and other Pensions, Trust Funds under Administration, Recoverable Expenditures, Returned Soldiers' Insurance, etc.)—

Militia pensions (statute)	$ 1,445,028	
North West Rebellion and civil flying	20,000	
Interest on trust funds	4,040	
War service gratuities	5,652	
Returned soldiers' insurance	843,813	
Pensions under administration	809,653	
Capital expenditures	100,869	
Recoverable expenditures	81,403	
Veterans' Assistance Commission	264,716	
		$ 3,575,174
Total Expenditure apart from Cost of Administration		$ 54,494,864

Cost of Administration—

Departmental—			
Salaries	$ 952,665		
General	127,493		
		$ 1,080,158	
Canadian Pension Commission		488,584	
Veterans' Bureau		181,824	
Pension Appeal Court		70,840	
Comptroller of the Treasury		431,061	
			$ 2,252,467
Total Expenditure			$ 56,747,331

The total costs of administration under the Pensions Branch, *viz.*, $2,252,467, shown above, include not only the costs of administering the services shown under "Expenditure" but also the costs of administering income (such as the collection of premiums on returned soldiers' insurance) and trust fund items, which amounted in the aggregate to $3,651,142 in 1938.

The Canadian Pension Commission.—By c. 45 of the Statutes of 1933, the Board of Pension Commissioners for Canada and the Pension Tribunal ceased to exist; their duties were taken over by the Canadian Pension Commission, which was formed by the Act referred to, and the personnel of the Commission was increased from three to not less than eight nor more than twelve.

The Commission is responsible for the adjudication and awarding of pensions in respect of disabilities connected with military service and the awarding of pensions to the dependants of those who die. It operates under the authority of the Pension Act. The following table shows the number of pensions in force at the end of each of the fiscal years 1918 to 1938, together with the annual liability. The large increase in disability pensioners from 1930 to 1933, inclusive, was primarily due to the reinstatement on pension of those who had commuted their pensions from 1920 onwards. This restoration was under the authority of an amendment to the Pension Act in 1930.

7.—Pensions in Force, as at Mar. 31, 1918-38.

Fiscal Year.	Dependants.		Disabilities.		Totals.	
	Number of Pensions.	Liability.	Number of Pensions.	Liability.	Number of Pensions.	Liability.
		$		$		$
1918	10,488	4,168,602	15,335	3,105,126	25,823	7,273,728
1919	16,753	9,593,056	42,932	7,470,729	59,685	17,063,785
1920	17,823	10,841,170	69,203	14,335,118	87,026	25,176,288
1921	19,209	12,954,141	51,452	18,230,697	70,661	31,184,838
1922	19,606	12,687,237	45,133	17,991,535	64,739	30,678,772
1923	19,794	12,279,621	43,263	18,142,145	63,057	30,421,766
1924	19,971	12,037,843	43,300	18,787,206	63,271	30,825,049
1925	20,015	11,804,825	44,598	19,816,380	64,613	31,621,205
1926	20,005	11,608,530	46,385	21,456,941	66,390	33,065,471
1927	19,999	11,419,276	48,027	22,811,373	68,026	34,230,649
1928	19,975	11,209,351	50,635	24,374,502	70,610	35,583,853
1929	20,002	11,090,158	54,620	26,095,150	74,622	37,185,308
1930	19,644	10,742,518	56,996	27,059,992	76,640	37,802,510
1931	19,676	10,985,518	66,669	29,226,208	86,345	40,211,726
1932	19,308	10,859,806	75,878	30,998,571	95,186	41,858,377
1933	18,745	10,624,775	77,967	31,124,543	96,712	41,749,318
1934	18,236	10,339,971	77,855	30,453,454	96,091	40,793,425
1935	18,241	10,372,607	78,404	30,406,414	96,645	40,779,021
1936	18,175	10,381,121	79,124	30,473.353	97,299	40,854,474
1937	18,186	10,417,158	79,789	30,365,865	97,975	40,783,023
1938	18,105	10,411,095	79,876	30,270,960	97,981	40,682,055

The number of medical examinations for pension purposes carried out during the fiscal year 1938 was 22,663, being a decrease of 2,246 as compared with the previous year.

TOTAL NUMBERS OF PERSONS IN RECEIPT OF BENEFITS UNDER THE PENSION ACT, AS AT MAR. 31, 1937 AND 1938.

	1937.		1938.	
Disability pensioners	79,789		79,876	
Disability pensioners' wives	57,439		57,121	
Disability pensioners' children	88,543		80,399	
Disability pensioners' other relatives	1,411		1,329	
Disability pensioners (housekeepers, Sections 22-9 and 77B, Pension Act)	412		598	
		227,594		219,323
Dependent pensioners	18,186		18,105	
Dependent pensioners' children	3,675		3,399	
Other relatives in addition to main dependants	1,507	23,368	1,418	22,922
Supplementary Pensions In Effect.				
Disability—				
Militia Pension Act (Sections 48 and 49, Pension Act)	22		21	
Supplementary to awards paid by the United Kingdom (Sections 45 and 46, Pension Act)	257		211	
R.N.W.M. Police Supplementary (Sec. 48, Pension Act)	2	281	1	233
Dependent—				
Militia Pension Act (Sections 48 and 49, Pension Act)	6		6	
Supplementary to awards paid by the United Kingdom (Sections 45 and 46, Pension Act)	50		50	
Supplementary to awards paid by Belgium (Section 46, Pension Act)	1		1	
Supplementary to awards paid by France (Section 46, Pension Act)	31		31	
Supplementary to awards paid by Italy (Section 46, Pension Act)	4	92	5	93
Grand Totals		251,335		242,571

Rates of pensions for all ranks will be found in tables on pp. 960-962 of the 1925 Year Book, to which the reader is referred.

Pension Appeal Court.—This Court continues to function and the following is a summary of decisions rendered during the year ended Mar. 31, 1938:—

DECISIONS RENDERED ON APPEALS.

	No.	No.
By applicants from Pension Tribunal decisions—		
Allowed	2	
Disallowed	92	
		94
By applicants from decisions of the Canadian Pension Commission—		
Allowed	5	
Disallowed	105	
Remitted	3	
		113
By applicants from decisions of quorums of the Commission—		
Allowed	12	
Disallowed	2,046	
Remitted	20	
		2,078
y the Crown from decisions of quorums of the Commission—		
Allowed	17	
Disallowed	24	
Disallowed (Section 76-3)	20	
Disallowed on jurisdiction	1	
Remitted	16	
		78
		2,363

DECISIONS RENDERED ON APPLICATIONS.

That leave be granted to the Canadian Pension Commission to entertain a fresh application—		
Allowed	47	
Disallowed	140	
		187
For leave to renew before the Court applications for Compassionate Pension or Allowance under Section 21 of the Act—		
Disallowed		18
		205

Veterans' Bureau.—Pursuant to legislation passed in 1930, a Veterans' Bureau was organized as a branch of the Department and came into active operation on Oct. 1, 1930. The duties of the Bureau are set forth on p. 945 of the Canada Year Book, 1932. Briefly stated, the Bureau was created and is operated to assist applicants for pension in the preparation and presentation of their cases. There is a Chief Pensions Advocate with his staff at Ottawa, and Pensions Advocates have their offices in all the principal cities of Canada.

War Veterans' Allowances.—The War Veterans' Allowance Act was enacted in 1930 to provide for the maintenance of veterans who, because of age or disability, are incapable of providing for themselves.

The Act provides for the payment of allowances to veterans with the requisite service, at the age of sixty years, or at any age, if so disabled as to be "permanently unemployable".

In addition to providing for the veteran of 60 and the "permanently unemployable" veteran, provision is made in the Act for a further group, as a result of the deliberations of a Parliamentary Committee in 1936. This group is referred to in the Act as "those having served in a theatre of actual war who have attained the age of 55 and who, in the opinion of the Board, are incapable of maintaining themselves because of pre-ageing, disability and general unfitness".

This amendment, therefore, provides for a border-line class to include those who, from a medical standpoint, cannot be classed as "permanently unemployable" and who, from an age standpoint, have not quite reached the age of sixty.

An outline of the provisions of the original Act will be found at pp. 946-947 of the 1932 Year Book.

NUMBERS OF RECIPIENTS AND ANNUAL LIABILITY.

Item.	1937.		1938.	
	Number of Cases.	Annual Liability.	Number of Cases.	Annual Liability.
		$		$
Veterans' allowance payments in force at beginnings of fiscal years	8,820	2,780,271	11,306	3,583,379
Awards during fiscal years	3,024	935,677	2,668	839,352
Increases due to change in rates	-	29,529	-	18,954
Reinstatements	173	49,395	126	35,478
Totals	12,017	3,794,872	14,100	4,477,163
Cancellations, on account of death, etc	711	211,493	856	254,810
Payments in force, Mar. 31, 1937, and Mar. 31, 1938	11,306	3,583,379	13,244	4,222,353

ANALYSIS OF AWARDS AND REINSTATEMENTS MADE FROM SEPT. 1, 1930, TO MAR. 31, 1938.

Item.	Over 60.	Under 60.	Total.
Allowances approved and reinstated from Sept. 1, 1930, to Mar. 31, 1937	8,291	6,663	14,954
Awards Apr. 1, 1937, to Mar. 31, 1938	1,189	1,479	2,668
Reinstatements, Apr. 1, 1937, to Mar. 31, 1938	68	58	126
Total awards and reinstatements to Mar. 31, 1938	9,548	8,200	17,748
Cancellations for all reasons, by deaths, etc., from Sept. 1, 1930, to Mar. 31, 1938	[1]	[1]	4,504
Total number of veterans in receipt of allowances at Mar. 31, 1938	-	-	13,244

[1] Not available by age groups.

Returned Soldiers' Insurance.*—The Returned Soldiers' Insurance Act is under the jurisdiction of the Canadian Pension Commission as agent for the Minister of Finance. Collections are made through the Department and payments by the Representative of the Treasury. After several extensions, the date to which applications could be received expired on Aug. 31, 1933.

OPERATIONS UNDER THE RETURNED SOLDIERS' INSURANCE ACT, FISCAL YEARS 1936-39.

Item.		1936.	1937.	1938.	1939.
Policies reinstated	No.	1,557	444	1,051	907
Policies surrendered for cash	"	694	583	441	521
Policies in force	"	25,845	24,801	23,880	22,939
Amounts of insurance	$	55,326,246	52,802,684	50,677,796	48,450,034
Amounts of premium income	$	1,410,220	1,327,149	1,250,516	1,152,924
Expenditures	$	778,317	852,548	843,813	870,525
Death claims from commencement of operations	No.	3,776	4,085	4,361	4,654
Amounts of death claims	$	9,514,848	1,563,631	531,619	1,133,651
Balances on hand	$	14,676,572	15,765,227	16,826,686	17,783,544

---

* Revised by D. S. Drew, Chief, Insurance Division, Department of Pensions and National Health.

Section 6.—Soldier Settlement of Canada.*

At the end of the calendar year 1938 the Soldier Settlement of Canada had 19,843 farm properties under administration, representing a net investment of $46,110,222. Under the Soldier Settlement Act of 1919, 25,017 soldier settlers were established on the land with loans. On Dec. 31, 1938, there were 9,553 soldier settlers, 5,851 civilian settlers, and 1,667 settlers under the British Family Scheme. There were 2,772 farms on hand of which 2,053 were leased; 3,808 settlers had repaid their loans in full in cash; 2,123 properties had been transferred to municipalities and provinces under Sec. 21A of the Soldier Settlement Act.

Under the 3,000 British Family Scheme, 3,346 families came forward for settlement. Of these 1,828 had withdrawn as at Dec. 31, 1938, 27 had repaid their loans, leaving 1,491 families still operating their farms. Under the New Brunswick Family Settlement Agreement, 359 families came forward; of these one had repaid his loan, 182 had withdrawn, and 176 remained on the land.

The following numbers of settlers had applied for the benefits of the Farmers' Creditors Arrangement Act: 2,632 soldier settlers, 1,125 civilian settlers, and 1,318 British family settlers. Of these applications, 1,048 cases of soldier settlers had been disposed of, involving indebtedness of $3,873,567 and a reduction of $1,377,855; civilians—604 cases disposed of, debt $2,146,555, reduction $721,540; British family settlers—657 cases disposed of, indebtedness $2,770,240, reduction $1,235,513.

The supervision staff of the Department have made land appraisals and reported on the applications of farmers (other than those under the Soldier Settlement of Canada) under the Farmers' Creditors Arrangement Act. To Dec. 31, 1938, 10,237 land appraisals and reports had been made in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, and the Maritime Provinces.

Other investigational services in the calendar year 1938 were: 284 investigations for the Department of Mines and Resources; 7,067 investigations in rural districts with respect to applications under the War Veterans' Allowance Act of 1930; 2,953 investigations for the Department of Pensions and National Health and the Canadian Pension Commission with respect to applications for relief allowances and special investigations of pension cases in rural districts.

Section 7.—Department of the Secretary of State.†

The Department of the Secretary of State was constituted in its present form in 1873, through the merging of the previously-existing offices of the Secretaries of State for Canada and for the provinces. The Secretary of State is the official mouthpiece of the Government as well as the medium of communication between the Dominion and Provincial Governments, all correspondence between the Governments being conducted by him with the Lieutenant-Governors. He is also the custodian of the Great Seal of Canada and the Privy Seal as well as the channel by which the general public may approach the Crown.

The Secretary of State is also the Registrar General, registering all proclamations, commissions, licences, warrants, writs, and other instruments issued under the Great Seal and the Privy Seal. He is further charged with the administration of the Boards of Trade Act, the Companies Act, the Canada Temperance Act, the Copyright Act, the Naturalization Act, the Patent Act, the Trade Unions Act, the

---

* Revised by F. C. Blair, Director, Soldier Settlement of Canada.

† Revised by E. H. Coleman, K.C., LL.D., Under-Secretary of State, Department of the Secretary of State.

Ticket of Leave Act, the Unfair Competition Act, and with the collection and tabling of parliamentary returns. Statistics regarding patents and copyrights appear under Chapter XVII at pp. 598-601. The following information on other subjects has been secured in the course of administration.

Charters of Incorporation.—The number of companies incorporated under the Companies Act and amending Acts during the fiscal year 1938 was 358 with a total capitalization of $104,401,299. Supplementary letters patent were granted during the year to 251 companies; 47 of these increased their capital stock by the aggregate amount of $22,571,383, 60 decreased their capital stock by $33,229,414; the remaining 144 were granted supplementary letters patent for various purposes, such as changing names, extending powers, etc. The total capitalization of new companies plus the increase of capital of existing companies amounted to $126,972,682, partly offset by the above-mentioned decreases in capitalization totalling $33,229,414.

In Table 8 will be found the number and capitalization of companies incorporated during the years 1914-38.

8.—Number and Capitalization of Companies Incorporated under the Companies Act and Amending Acts, fiscal years 1914-38.

Note.—Statistics for the years 1900-13 will be found at p. 1061 of the 1938 Year Book.

Year.	New Companies.		Old Companies with Increased or Decreased Capitalization.				Gross Increase in Capitalization.	Net Increase in Capitalization.
	Number.	Capitalization.	Number.	Increase in Capitalization.	Number.	Decrease in Capitalization.		
		$		$		$	$	$
1914	647	361,708,567	61	63,599,003	3	3,290,000	425,307,570	422,017,570
1915	461	208,283,633	34	26,650,000	4	6,840,000	234,933,633	228,093,633
1916	534	157,342,800	28	68,996,000	11	4,811,700	226,338,800	221,527,100
1917	606	207,967,810	36	26,540,000	3	5,050,000	234,507,810	229,457,810
1918	574	335,982,400	41	69,321,400	4	1,884,300	405,303,800	403,419,500
1919	512	214,326,000	69	67,583,625	11	2,115,985	281,909,625	279,793,640
1920	991	603,210,850	88	85,187,750	10	19,530,000	688,398,600	668,868,600
1921	852	752,062,683	135	79,803,000	17	7,698,300	831,865,683	824,167,383
1922	875	351,555,900	43	18,275,000	13	5,121,450	369,830,900	364,709,450
1923	752	314,603,050	45	46,108,500	30	10,751,123	360,711,550	349,960,427
1924	604	204,646,283	58	15,352,755	27	57,944,410	219,999,038	162,054,628
1925	663	231,044,800	47	15,549,573	28	43,863,633	246,594,373	202,730,740
1926	801	353,342,800	48	33,303,500	47	43,797,780	386,646,300	342,848,520
1927	836	692,540,900	70	33,524,000	40	16,905,045	726,064,900	709,159,855
1928	1,102	538,595,570	82	179,167,100	31	37,123,580	717,762,670	680,639,090
1929	1,202	1.406,006,340	128	412,396,320	40	48,005,533	1,818,402,660	1,770,397,127
1930	1,280	1,346,138,367	127	293,496,800	35	46,955,000	1,639,635,167	1,592,680,167
1931	898	562,613,797	75	153,524,400	39	50,604,545	716,138,197	665,533,652
1932	760	294,770,312	43	27,981,750	44	52,773,618	322,752,062	269,978,444
1933	548	145,453,718	38	44,621,950	46	31,636,447	190,075,668	158,439,221
1934	531	175,239,320	38	62,615,060	61	86,810,799	237,854,380	151,043,581
1935	472	171,689,140	47	35,416,353	60	73,634,742	207,105,493	133,470,750
1936	371	141,237,550	41	54,073,000	76	79,640,610	195,310,550	115,669,940
1937	410	130,767,280	72	143,597,766	105	123,837,999	274,365,046	150,527,047
1938	358	104,401,299	47	22,571,383	60	33,229,414	126,972,682	93,743,267

[1] Includes consideration of the amounts of capital received on the issue of shares without nominal or par value.

Naturalizations.—The naturalizations effected under the Naturalization Act (R.S.C., 1906, c. 77) for the calendar years 1908-17, inclusive, are given on p. 594 of the Year Book for 1919. Since Jan. 1, 1918, the only method of obtaining naturalization has been under what is known as the 'Imperial' Naturalization Act, which came into force on Jan. 1, 1915. This Act was known under the title of the Naturalization Act, 1914, until July 7, 1919, when it was repealed and the Naturalization Act, 1919, came into force. On July 1, 1920, the Naturalization Act, 1919 was repealed, and the Naturalization Act, 1914, was revived and amended under the title of the Naturalization Acts, 1914 and 1920. By an amendment passed by Parliament in 1923, the restriction by which persons of alien enemy birth were ineligible to receive certificates of naturalization for a period of 10 years after the termination of the War was removed, and at the present time any alien may apply for naturalization, regardless of his nationality. All these Acts have been consolidated in R.S.C., 1927, c. 138. Since Jan. 15, 1932, women British subjects, marrying aliens, retain British nationality, unless they, by marriage, acquire their husbands' nationalities, and the wives of aliens no longer become British subjects through their husbands' naturalization. They must apply to the Secretary of State.

Table 9 shows the number of naturalization certificates issued to single persons or heads of families under these Acts during the calendar years from 1928 to 1937. The total numbers of persons naturalized during the fiscal years 1937 and 1938, were 31,744 and 27,455, respectively, including (except as stated above) the wives and minor children of those to whom naturalization certificates were issued.

9.—Naturalizations in Canada, by Principal Nationalities, calendar years 1928-37.

Nationality.	1928.	1929.	1930.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
Albanian	11	9	4	4	2	2	4	4	5	13
Argentinian	2	1	4	3	3	2	5	4	10	3
Austrian	728	890	1,004	1,050	1,057	659	804	1,015	996	1,069
Austro-Hungarian	2	5	4	5	3	5	Nil	3	4	6
Belgian	169	264	274	257	284	305	267	383	373	486
Brazilian	–	3	1	Nil	2	Nil	2	Nil	4	Nil
Bulgarian	46	64	41	37	44	30	37	46	53	72
Chinese	28	24	23	22	5	1	1	7	6	2
Costa Rican	–	–	–	–	–	–	–	1	Nil	Nil
Czechoslovak	57	287	287	646	1,078	964	910	1,052	1,080	1,364
Danish	132	208	217	249	285	390	418	677	771	686
Danziger	1	Nil	1	2	5	4	5	2	7	10
Dutch	64	112	143	203	229	197	181	356	434	442
Egyptian	Nil	1	1	Nil	Nil	2	Nil	1	Nil	2
Estonian	8	9	10	14	16	24	34	51	44	34
Finnish	133	288	276	319	329	359	410	601	601	687
French	98	118	119	154	127	126	103	154	219	277
German	171	288	420	449	530	675	899	1,495	2,079	1,851
Greek[1]	153	173	181	97	121	113	157	216	193	185
Hungarian	45	184	396	780	829	721	856	1,166	1,138	1,224
Icelandic	17	12	17	30	21	8	24	31	29	22
Italian	1,146	1,739	1,186	1,183	1,418	1,265	779	829	894	1,067
Japanese	35	18	33	7	Nil	1	10	49	49	41
Latvian	30	25	25	29	34	29	39	61	56	55
Lithuanian	55	55	46	130	192	275	332	427	514	396
Luxemburger	5	4	2	4	8	5	Nil	4	12	8
Memel (Territory)	–	–	–	–	–	–	–	1	Nil	Nil
Mexican	Nil	1	Nil	2	Nil	1	Nil	3	"	1
Montenegrin	–	–	–	–	–	–	–	2	"	2
Norwegian	197	424	381	412	453	498	521	687	737	724
Palestinian	4	6	6	4	1	5	10	15	11	9
Persian	3	1	4	1	4	3	Nil	3	4	2
Polish	962	1,295	1,218	2,623	4,240	3,749	4,279	6,113	6,302	6,949
Roumanian	437	671	588	614	781	720	852	1,195	1,157	1,087
Russian	858	1,687	1,940	2,527	2,936	1,970	1,807	2,178	2,256	2,216
Spanish	10	7	8	8	9	5	5	5	7	11
Swedish	242	295	310	442	375	385	444	638	704	681
Swiss	13	26	38	27	61	47	64	90	125	152
Syrian	–	–	–	53	86	77	60	69	55	80
Turkish[2]	128	160	174	56	40	30	33	54	28	31
United States	939	1,073	1,104	1,652	1,877	1,374	1,240	1,905	2,170	2,013
Yugo-Slav (Serb-Croat-Slovene)	78	295	404	646	1,018	1,160	979	882	888	845
All others	12	12	16	11	24	54	47	66	55	61
Totals	**7,019**	**10,734**	**10,906**	**14,752**	**18,527**	**16,240**	**16,618**	**22,541**	**24,070**	**24,866**

[1] Includes 1 Greek Macedonian for 1930.

[2] Includes also Syrian, Armenian, Greek, Bulgarian, Palestinian, and Mesopotamian Turks.

Canada Temperance Act.—Under Parts I and II of this Act, provision is made for the prohibition of the sale of intoxicating liquors in counties and cities. The last vote taken under these Parts was in the county of Compton, Que., on Apr. 28, 1930, in response to a petition for the repeal of the Act in that county. The vote resulted in favour of the repeal, which became effective on June 14, 1930. Part III of the Act relates to penalties and prosecutions, Part IV to the prohibition of the importation and exportation of intoxicating liquors into and from the provinces, while Part V enacts provisions in aid of provincial legislation for the control of the liquor traffic.

Section 8.—Royal Canadian Mounted Police.*

The Royal Canadian Mounted Police is a constabulary maintained by the Dominion Government. It was organized in 1873, and was known as the North West Mounted Police, whose duties were confined to what was then known as the Northwest Territories. In 1904, its name was changed to Royal North West Mounted Police.

In 1905, when Alberta and Saskatchewan were constituted provinces, an arrangement was made whereby the Force continued to discharge its duties as formerly, each province making a contribution towards defraying the cost. This was continued until 1917. Soon after the close of the Great War an extension of Governmental activities made it obvious that the enforcement of Dominion Statutes was assuming increasing proportions, and that it would soon be necessary to have a police force responsible therefor. In 1918, the duty was assigned to the Royal North West Mounted Police of the enforcement of Dominion legislation for the whole of Western Canada west of Port Arthur and Fort William, and in 1920 for the whole of Canada.

In 1920, the name of the Force was changed to the Royal Canadian Mounted Police, and the former Dominion Police with headquarters at Ottawa, whose duties were largely connected with guarding public buildings in that city and the Canadian Government dockyards at Halifax, N.S., and Esquimalt, B.C., were absorbed by the Royal Canadian Mounted Police.

At the present time, the R.C.M. Police is responsible throughout Canada for the enforcement of the laws against smuggling by land, sea, and air. It enforces the provisions of the Excise Act, is responsible for the suppression of the traffic in narcotic drugs, enforcement of the Migratory Birds Convention Act, and assists the Mines and Resources, Fisheries, and several other Dominion Departments, in executing the provisions of their respective Acts, and in some cases in administrative duties. It is responsible for the protection of government buildings and dockyards. It is the sole police force operating in the Yukon Territory and the Northwest Territories, and performs a variety of services in all provinces and both Territories for the Dominion Government.

Under the R.C.M. Police Act, any province may enter into an agreement with the Dominion Government for the services of the Royal Canadian Mounted Police, to enforce provincial laws and the Criminal Code, upon payment for its services, and at the present time such agreements are in force with the provinces of Prince Edward Island, Nova Scotia, New Brunswick, Manitoba, Saskatchewan, and Alberta.

The Force is controlled and administered by a Minister of the Crown (at present the Minister of Justice) and it may be employed anywhere in Canada. From a force of 300 in 1873, it had a strength on Dec. 31, 1938, of 2,591. Its means of transport at that time consisted of 138 horses, 531 motor vehicles, and 405 sleigh dogs and 12 police dogs. The Force is organized into 13 divisions of varying strength distributed over the entire country. The term of engagement is five years for recruits, with re-enlistment for a period not exceeding five years. The Officers are commissioned by the Crown. Recruits are trained at Regina, Sask. The course of training is six months and consists of drill, both mounted and dismounted; physical training, including instruction in wrestling, boxing, and jiu-jitsu. Special attention is paid to police duties, both Dominion and provincial, and detailed lectures are given in these, including court procedure. Instructional courses for promotion are held, and, where practicable, an annual refresher course of training is given.

---

* Revised by Brigadier S. T. Wood, Commissioner, Royal Canadian Mounted Police.

In 1937, a 'Reserve' strength of 300 men was authorized by Parliament; during the months of July and August, 1937, 300 'Reservists' were given training at Fredericton, N.B., Ottawa, Ont., Regina, Sask., and Vancouver, B.C. In future these 'Reservists' will be the principal source from which recruits for the Force will be drawn. The Reserve now stands at 252.

10.—Strength and Distribution of the Royal Canadian Mounted Police, as at Dec. 31, 1938.

Place.	Commissioner.	Deputy Commissioners.	Asst. Commissioners.	Superintendents.	Inspectors.	Detective Inspectors.	Sub-Inspectors.	Surgeon.	Staff Sergeants	Sergeants	Corporals.
P.E.I.	Nil	Nil	Nil	1	Nil	Nil	1	Nil	Nil	1	3
N.S.	"	"	2	2	4	"	1	"	4	13	18
N.B.	"	"	Nil	1	4	"	Nil	"	3	9	16
Que.	"	"	"	2	2	"	1	"	1	8	11
Ont.	1	1	2	6	13	1	6	"	21	42	58[1]
Man.	Nil	Nil	1	2	3	Nil	1	"	4	14	21
Sask.	"	1	Nil	1	11	"	3	1	10	35	44
Alta. "K" Div.	"	Nil	1	1	7	1	1	Nil	6	22	31
N.W.T. "G" Div.	"	"	Nil	1	3	Nil	Nil	"	Nil	5	4
Yukon "G" Div.	"	"	"	1	Nil	"	"	"	"	1	3
B.C.	"	"	"	1	2	"	"	"	3	8	10
Totals	**1**	**2**	**6**	**19**	**49**	**2**	**14**	**1**	**52**	**158**	**219**

Place.	Lance Corporals.	Constables.	Sub-Constables.	Special Constables.	Marine Section.	Total Personnel.	Saddle Horses.	Team and Pack Horses	Total Horses.	Dogs.
P.E.I.	3	21	Nil	3	11	44	Nil	Nil	Nil	Nil
N.S.	15	136	1	2	189	387	"	"	"	"
N.B.	11	80	2	4	10	140	"	"	"	1
Que.	7	95	Nil	3	14	144	"	"	"	Nil
Ont.	55	346	11	20	2	585	37	2	39	10
Man.	19	131	Nil	11	Nil	207	Nil	Nil	Nil	37
Sask.	37	380[2]	16	23	"	562	87	5	92	36
Alta. "K" Div.	24	213	Nil	25	"	332	4	3	7	12
N.W.T. "G" Div.	11	34	1	19	"	78	Nil	Nil	Nil	315
Yukon "G" Div.	2	8	Nil	4	"	19	"	"	"	6
B.C.	7	52	1	7	2	93	"	"	"	Nil
Totals	**191**	**1,496**	**32**	**121**	**228**	**2,591**	**128**	**10**	**138**	**417**

[1] Including 1 at the High Commissioner's office at London, England. [2] Including 8 trumpeters in Saskatchewan.

Section 9.—The Civil Service of Canada.

Organization.*—Prior to 1882, appointments to the Civil Service were made directly by the Government. In that year, a Board of Civil Service Examiners was appointed to examine candidates and issue certificates of qualification to those successful at examinations. Appointments, however, were still made by the Government of the day.

The Royal Commission of 1907, appointed to inquire into the Civil Service Act and its operation, reported in favour of the creation of a Civil Service Commission. This body was established in 1908; it consisted of two members appointed by the Governor in Council and holding office during good behaviour, but removable by the Governor General on address of the Senate and House of Commons. The Civil Service was classified into three divisions under the Deputy Heads of Departments, each division consisting of two subdivisions, each of these having its scale of salaries. The Commission was charged with: the organization of, and appointments to, the Inside Service (at Ottawa), certain appointments to be made after open competition and others after qualifying tests; and the holding of qualifying examinations for the Outside Service (the Service apart from Ottawa) to obtain lists from which selections could be made by the various Departments. All British subjects between 18 and 35 years of age who had resided in Canada for three years were eligible to try these examinations.

In 1918, a third member of the Civil Service Commission was appointed, and by the Civil Service Act of that year the principle of appointment after open competition was applied to the Outside as well as the Inside Service. The Act also provided for the organization by the Commission of the various Government Departments, for a classification of all positions in the Service on a duties basis, for the establishment of new rates of compensation, and for the principle of promotion by merit wherever consistent with the best interests of the Service. Provision was also made for preference, in the matter of appointment to the Service, to be given to qualified applicants who had served in the Great War.

Subsequent amendments have removed from the Commission's jurisdiction some branches of the Service, such as skilled and unskilled labour positions, and the staffs of certain units.

Civil Service Statistics.†—From April, 1924, a monthly return of personnel and salaries has been made by each Department to the Dominion Bureau of Statistics, according to a plan that ensures comparability between Departments and continuity in point of time. The institution of this system was preceded by an investigation covering all years back to 1912; summary results are presented in Table **11**.

During the War years, as will be seen from Table **11**, the number of employees increased very rapidly, as a result of the extension of the functions of government and the imposition of new taxes, necessitating additional officials as collectors. Such new services as the Department of Pensions and National Health and the Soldier Settlement Board were also created. The maximum was reached in January, 1920, when 47,133 persons were employed; this number has since decreased to 43,859 in January, 1938. It may be added that, out of 44,102 in March, 1938 (see Table **13**), 1,261 in the Income Tax Branch and 2,288 in the Department of Pensions and National Health, or 3,549 in all, were engaged in services of outstanding importance which had no existence before the War. Further, 12,122 persons were, in March, 1938, employed in the Post Office Department, performing services of an industrial rather than of a governmental type, and receiving their salaries out of payments made by the public for services immediately rendered, rather than out of taxation.

---

* Revised by Miss E. Saunders, Assistant Secretary, Civil Service Commission, Ottawa.

† Revised by Col. J. R. Munro, Chief of the Finance Branch of the Dominion Bureau of Statistics, Ottawa.

The statistics of numbers of employees and of salaries, now being secured monthly, are more comprehensive than those previously published, as a result of the inclusion of various classes of employees, largely part-time, seasonal and 'fees of office' employees, who were not included in the report published in 1925. These employees are largely in the Departments of Transport, Fisheries, and Public Works. There remain, however, many persons in the "non-enumerated classes" whose numbers cannot be supplied monthly by the departmental officials but whose compensation is included in the monthly figures of expenditure on personnel, as shown in Table **12**.

11.—Summary of Civil Service Employees (Permanent and Temporary) of the Government of Canada, together with Total Salaries, in the months of January of the years 1912-38, inclusive.

Year.	Employees.	Salaries.	Bonuses.	Salaries and Bonuses.
	No.	$	$	$
January—				
1912	20,016	1,519,778	16,413	1,536,191
1913	22,621	1,780,703	22.569	1,803,272
1914	25,107	1,960,238	27.971	1.988.209
1915	28,010	2,268,700	32,167	2,300,867
1916	29,219	2,400,068	31,431	2,431,499
1917	32,435	2.673.767	29.167	2,702,934
1918	38,369	3,147,461	94.321	3,241,782
1919	41,825	3.552.686	557.882	4.110.568
1920	47,133	4,423,157	965.538	5.388.695
1921	41,957	4,414,669	861,973	5,276,642
1922	41,094	4.369.509	616,105	4,985.614
1923	38,992	4,268.357	463,470	4,731,827
1924	38,062	4,297,467	449,228	4,746,695
1925[1]	38,645	4,473,470	166,461	4,639,931
1926	39,097	4,699.076	Nil	4,699.076
1927	39,440	4,786.615		4,786.615
1928	40,740	5,161.558		5,161.558
1929	42.038	5,428.058		5,428.058
1930	43,525	5,543.749		5,543.749
1931	45,167	5,757,554		5,757,554
1932	43,784	5,653,169		5,653.169
1933	41,920	4,775.591		4.775.591
1934	41,346	4,698,536		4,698,536
1935	41,348	4,757,045		4,757,045
1936	40,813	5,000,539		5,000,539
1937	43,413[2]	5,210,210[2]		5,210,210
1938	43,859	5,505,877		5,505,877

[1] Figures for January, 1925-38, are not comparable with those for preceding Januaries, because monthly records now being published include various classes of employees not included in the historical record for the 13 years 1912-24.
[2] Revised since the publication of the 1938 Year Book.

Table **12**, which gives statistics by Departments with a further classification by principal branches where available, is included in order to give comparable figures for the latest months. In the month of March, 1938, the total number of employees in the enumerated classes was 44,102 as compared with 42,836 in March, 1937. The total expenditure on wages and salaries for all classes of employees except "non-enumerated classes" for March, 1938, was $5,612,621 as compared with $5,227,843 for March, 1937.

12.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1937, and March, 1938.

Department.	March, 1937.		March, 1938.[1]	
	No.	Expenditure.	No.	Expenditure.
		$		$
Agriculture—				
Main Department	1,406	190,261	1,607	241,667
Experimental Farms	546	122,714	590	138,613
Health of Animals	681	102,030	729	122,351
Totals, Agriculture	2,633	415,005	2,926	502,631
Archives	69	10,458	74	11,621
Auditor-General	220	32,809	226	39,150
Chief Electoral Officer	6	875	5	820
Civil Service Commission	195	22,866	230	27,065
External Affairs—				
Prime-Minister's Office	23	3,036[2]	26	3,256[2]
Administrative and Passport	61	9,451	65	10,808
The High-Commissioner's Office	35	5,802[2]	41	7,096[2]
Director Canadian Trade Publicity	4	438	4	538[2]
Canadian Legation, Washington, U.S.A.	16	3,836[2]	19	4,423[2]
Canadian Legation, Paris, France	10	1,910[2]	12	2,782[2]
The League of Nations	6	1,655[2]	7	2,080[2]
Canadian Legation, Tokyo, Japan	12	2,499[2]	11	2,402[2]
Totals, External Affairs	167	28,627[2]	185	33,385[2]
Finance	280	35,869	293	39,332
Comptroller of Treasury	982	128,795	989	133,542
Government Contracts Supervision Commission	5	794	[3]	[3]
Royal Canadian Mint	106	15,005	115	16,655
Superintendent of Bankruptcy	13	2,152	13	2,292
Tariff Board	23	6,422	20	6,015
Fisheries	309	64,814	301	68,374
Governor-General's Secretary[4]	12	2,588	12	2,760
House of Commons—				
Clerk of the House	272	44,575	277	47,125
Sergeant-at-Arms	248	21,351	291	24,655
Totals, House of Commons	520	65,926	568	71,780
Insurance	49	9,274	54	10,617
International Joint Commission	7	2,635	6	2,605
Justice—				
Main Department	48	8,980	46	9,590
Clemency Branch	14	2,174	12	1,927
Purchasing-Agent's Office	6	804	6	960
Penitentiaries	916	110,133	949	119,079
Supreme Court	22	3,728	21	3,938
Exchequer Court	10	1,893	10	2,017
Totals, Justice	1,016	127,712	1,044	137,511

---

[1] Subject to revision. [2] Including living allowances. [3] Included under Comptroller of the Treasury. [4] Salaries of A.D.C.'s are included, but not their number.

12.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1937, and March, 1938—continued.

Department.	March, 1937.		March, 1938.[1]	
	No.	Expenditure.	No.	Expenditure.
		$		$
Labour—				
Main Department	102	15,732	111	18,513
Annuities	46	4,957	45	17,059
Technical Education	1	182	1	192
Dominion Unemployment Relief	89	12,671	87	13,169
Totals, Labour	238	33,542	244	48,933
Library of Parliament	24	4,502	25	4,881
Mines and Resources—				
Departmental Administration	-	-	63	11,912
Immigration	621	84,844	587	81,158
Indian Affairs	1,072	86,284	1,047	86,545
Lands, Parks and Forests	971	147,460	527	66,141
Surveys and Engineering			422	78,220
Mines and Geology	460	77,247	460	84,861
Totals, Mines and Resources	3,124	395,835	3,106	408,837
National Defence—				
General Defence Administration	161	21,770	180	24,654
Militia Services	619	53,873	714	65,776
Naval Services	156	31,053	159	38,668
Air Services	250	25,802	88	9,893
Military Topographic Surveys	20	3,939	18	4,140
Royal Military College	85	11,016	91	11,753
Dominion Arsenal, Quebec, inc. Ammun. Inspection	45	38,539	56	63,055
Totals, National Defence	1,336	185,992	1,306	217,940
National Research Council	171	29,866	185	34,275
National Revenue—				
Main Department	4,307	611,758	4,523	667,799
Income Tax Division	1,214	159,120	1,261	170,186
Totals, National Revenue	5,521	770,878	5,784	837,985
Pensions and National Health—				
Pensions	1,799	212,909	1,776	217,991
Canadian Pension Commission	225	37,094	213	35,874
Health	265	48,020	259	51,649
Pensions Appeal Court	12	3,257	12	3,452
Veterans' Assistance Commission	53	6,694	28	3,815
Totals, Pensions and National Health	2,354	307,974	2,288	312,781
Post Office—[2]				
Civil Government	887	109,635	912	116,913
Outside Service	10,762	4,620,385	11,210	4,682,744
Totals, Post Office	11,649	4,730,020	12,122	4,799,657
Privy Council	18	3,603	18	3,822
Public Printing and Stationery	622	104,653	635	112,222
Public Works—				
Civil Government	250	42,016	260	46,910
Outside Service	3,610	331,058	3,767	357,859
Totals, Public Works	3,860	373,074	4,027	404,769

---

[1] Subject to revision. [2] Statistics do not include the numbers of postmasters of non-revenue offices. It should also be noted that post-office expenditures are balanced by receipts from the public; see text on p. 1100.

12.—Total Numbers of Civil Service Employees, by Departments and Principal Branches ("Non-Enumerated Classes" Excluded), and Total Expenditures on Salaries and Wages of all Employees ("Non-Enumerated Classes" Included), March, 1937, and March, 1938—concluded.

Department.	March, 1937.		March, 1938.[1]	
	No.	Expenditure.	No.	Expenditure.
		$		$
Royal Canadian Mounted Police	108	221,329	100	226,024
Secretary of State (including Patents and Copyrights)	312	45,259	324	50,368
Senate	146	18,195	143	18,607
Soldier Settlement Board	325	46,302	311	41,346
Trade and Commerce—				
Headquarters and Miscellaneous Branches	66	10,158	68	13,239
Board of Grain Commissioners	649	102,500	564	98,138
Dominion Bureau of Statistics	705	65,932	503	55,382
Weights and Measures	136	18,520	148	21,044
Electricity and Gas	101	16,465	101	17,158
Commercial Intelligence Service	97	43,793	101	47,000
Motion Picture Bureau	26	4,097	26	4,237
Exhibitions	15	7,753	15	11,499
Canadian Government Elevators	72	13,134	81	12,471
Totals, Trade and Commerce	1,867	282,352	1,607	280,168
Transport—				
Marine Services	3,433	360,070	4,725	515,045
Railways and Canals	1,030	173,360		
Transport Commissioners	86	17,219	91	20,625
Totals, Transport	4,549	550,649	4,816	535,670
Grand Totals	**42,836**	**9,076,651**	**44,102**	**9,444,440**

[1] Subject to revision.

Section 10.—Supervision of Race-Track Betting.

By an amendment to Sec. 235 of the Criminal Code, passed in 1920, the supervision of race-track betting, under the pari-mutuel system, was placed in the hands of the Minister of Agriculture. The actual supervision is carried out by officers of the Royal Canadian Mounted Police and the system was operated for the first time during the racing season of 1921. Statistics are available from the year 1924 and are shown in Table **13** for the Dominion as a whole, while Table **14** gives figures by provinces for the year 1937.

13.—Race-Track Betting in Canada, fiscal years 1924-37.

Fiscal Year.	Associa-ations.	Days Racing.	Amounts Wagered.	Pari-Mutuel Receipts Retained.	Prize Money.
	No.	No.	$	$	$
1924	30	354	52,600,633	3,496,891	2,023,665
1925	33	344	49,867,765	3,359,708	1,925,735
1926	32	322	44,346,672	3,018,358	1,807,780
1927	31	354	47,915,828	3,278,179	2,034,587
1928	32	350	45,960,928	3,154,644	1,973,730
1929	30	335	45,580,845	3,104,456	1,886,800
1930	30	332	36,007,146	2,657,059	1,802,095
1931	30	326	33,377,786	2,379,558	1,564,945
1932	29	315	28,695,438	2,066,672	1,285,563
1933	28	324	25,137,598	1,831,411	1,147,871
1934	26	295	20,976,498	1,548,848	986,128
1935	27	321	20,891,669	1,534,739	1,065,835
1936	27	300	20,951,710	2,182,112	1,002,795
1937	27	302	22,275,787	2,281,239	1,046,440

14.—Race-Track Betting in Canada, by Provinces, fiscal year 1937.

Province.	Associations.	Days Racing.	Amounts Wagered.	Pari-Mutuel Receipts Retained.	Prize Money.
	No.	No.	$	$	$
Nova Scotia	1	4	5,598	2,764	1,290
Quebec	4	56	1,964,207	189,446	141,400
Ontario	8	109	13,536,009	1,389,191	552,955
Manitoba	2	28	2,153,351	222,815	100,600
Saskatchewan	2	12	289.686	34,100	21,850
Alberta	6	37	942,640	112,886	61,350
British Columbia	4	56	3,384,296	330,037	166,995
Totals	**27**	**302**	**22,275,787**	**2,281,239**	**1,046,440**

Section 11.—The Tariff Board.*

The Tariff Board was constituted by Act of Parliament in 1931 (c. 55, 21-22 Geo. V). It consists of three members (a Chairman, a Vice-Chairman, and a Member) and a Secretary, all appointed by the Governor in Council.

The constitution and duties of the Board are defined in two parts of the Act of 1931. Under Part I, the Board makes inquiry into and reports upon any matter in relation to goods which, if brought into Canada or produced in Canada, are subject to or exempt from duties of customs or excise and on which the Minister of Finance desires information. The investigation into any such matter may include inquiry as to the effect which an increase or decrease of the existing rate of duty upon a given commodity might have upon industry or trade, and the extent to which the consumer is protected from exploitation.

It is also the duty of the Board to inquire into any other matter or thing in relation to the trade or commerce of Canada which the Governor in Council sees fit to refer to the Board for inquiry and report.

The Act provides that reports shall be made to the Minister of Finance, and tabled in the House of Commons. The principal commodities reported on are: wool textiles; boots and shoes; jute yarns and twines; fruits and vegetables; hookless fasteners (zippers); wooden doors; silver-bearing articles (toiletware); rabbit skins; brass, copper, and nickel-silver commodities; boiler tubes; skelp; hats and hoods; biscuits; cork boards, slabs, and planks; crude petroleum and its derivatives; artificial silk yarns, cotton yarns and fabrics; plastics of all kinds; steel wool; certain sporting goods, etc. In 1939 reports were made on the radio industry; animal and vegetable oils, fats, and greases; cigars; coke; worsted weaving yarn; cocoa-fibre mats and matting; starches and dextrines; automobiles and furniture.

Part II of the Act empowers the Board to hear and decide appeals from rulings made by the Department of National Revenue with respect to fair market value of goods for duty purposes, erroneous appraisals, and the rate of duty applicable to any class of goods. Under Order in Council the Board has authority and power: (1) to declare or find with respect to any importation, whether any goods are "of a class or kind made or produced in Canada"; (2) to review the value for duty applied by the Customs to new or unused goods under provisions of Sec. 36 of the Customs Act and make its findings with regard thereto; (3) to determine and declare whether any and, if so, what drawback of Customs duty is payable under the provisions of Schedule B of the Customs Tariff. Findings of the Board of Appeals are published in the *Canada Gazette*.

---

* Revised by James R. MacGregor, Secretary, Tariff Board.

Section 12.—Dominion Trade and Industry Commission.*

The Dominion Trade and Industry Commission was constituted by Act of Parliament in 1935 (c. 59, 25-26 Geo. V). It consists of three Commissioners, one of whom is the Chief Commissioner and another the Assistant Chief Commissioner. The Act provides that for the time being the members of the Tariff Board (see Section 11) shall be the Commissioners, and the Chairman and Vice-Chairman of the Tariff Board shall be the Chief Commissioner and Assistant Chief Commissioner, respectively. The administration of the Act is vested in the Minister of Trade and Commerce.

Duties of the Commission consist of investigating and recommending the prosecution of offences against Acts of Parliament relating to commodity standards; preparation of draft specifications for commodity standards; application of the national trade mark "Canada Standard" to commodities that conform to specifications established under any Act of Parliament; investigation of complaints respecting unfair trade practices, and recommending the prosecution of offenders against any Dominion law prohibiting unfair trade practices; the convening of conferences for the purpose of considering commercial practices prevailing in industry, and determining what practices are unfair or undesirable in the interest of the industry or the public. Offences against Acts of Parliament and regulations relating to commodity standards and unfair trade practices are reported by the Commission to the Attorney General of Canada with a recommendation for prosecution.

Section 13.—Other Miscellaneous Administration.

In previous editions of the Year Book this chapter has been brought to a close with outlines of Dominion Government administration as follows: the International Joint Commission; the Geodetic Survey of Canada; the Topographical Survey; the Dominion Observatories.

The three latter services were, up to the end of 1936, administered by the Department of the Interior but, as will be seen from the outline of Dominion legislation on p. 1085 of the 1937 edition of the Year Book, the newly-organized Department of Mines and Resources, which came into effect on Dec. 1, 1936, absorbed the old Departments of Mines, Interior, Indian Affairs, and Immigration. The Geodetic Survey and the Dominion Observatories administrations are continued as Divisions of the Surveys and Engineering Branch of the new Department, but topographical survey work has been re-organized, the mapping work having been combined with the Hydrographic Service as a Division of the Surveys and Engineering Branch, and the topographical survey work taken over by the Bureau of Geology and Topography of the Mines and Geology Branch.

The purpose of establishing the above-mentioned new Departments was to correlate the efforts of the staffs of such older Departments as had, in the course of time, acquired overlapping features, or which could be more economically administered under one head without impairing the usefulness of necessary services.

---

* Revised by James R. MacGregor, Secretary, Dominion Trade and Industry Commission.

CHAPTER XXIX.—SOURCES OF OFFICIAL STATISTICAL AND OTHER INFORMATION RELATIVE TO CANADA.

The chief source of information on the current state of the country is the Dominion Bureau of Statistics, organized as the central statistical bureau for Canada, and described in the first section of this chapter.

The second section of the chapter contains a list of the Acts of Parliament administered by the several Departments of the Dominion Government, and the third section a bibliography of the publications of these Departments. This is followed, in Section 4, by a bibliography of the publications of Provincial Governments.

Section 1.—The Dominion Bureau of Statistics.*

The Dominion Bureau of Statistics was set up by statute in 1918 as a central statistical department for Canada (8-9 Geo. V, c. 43).† The Act was a consolidation of all previous statistical legislation and was based on the report of a Commission on Statistics, appointed in 1912, which recommended (*a*) a series of specific reforms and enlargements in Canadian statistics, and (*b*) a policy of statistical co-ordination for the Dominion, under central direction. In 1915, following the recommendations in this report, the office of Dominion Statistician was created but, as stated, it was not until 1918 that the recommendations of the Commission were embodied in legislation. Among its many provisions the following are indicated:—

> 3. There shall be a bureau under the Minister of Trade and Commerce, to be called the Dominion Bureau of Statistics, the duties of which shall be to collect, abstract, compile and publish statistical information relative to the commercial, industrial, social, economic and general activities and condition of the people, to collaborate with all other departments of the Government in the compilation and publication of statistical records of administration according to the regulations, and to take the Census of the Dominion as hereinafter provided.
>
> . . . . .
>
> 9. (1) The Minister may enter into any arrangement with the government of any province providing for any matter necessary or convenient for the purpose of carrying out or giving effect to this Act, and in particular for all or any of the following matters:—
> (*a*) The execution by provincial officers of any power or duty conferred or imposed on any officer under this Act or the regulations;
> (*b*) The collection by any provincial department or officer of any statistical or other information required for the purpose of carrying out this Act; and,
> (*c*) The supplying of statistical information by any provincial department or officer to the Dominion Statistician.
>
> . . . . .
>
> 15. (1) No individual return, and no part of an individual return, made, and no answer to any question put, for the purposes of this Act, shall, without the previous consent in writing of the person or of the owner for the time being of the undertaking in relation to which the return or answer was made or given, be published, nor, except for the purposes of a prosecution under this Act, shall any person not engaged in connection with the Census be permitted to see any such individual return or any such part of any individual return.
>
> (2) No report, summary of statistics or other publication under this Act shall contain any of the particulars comprised in any individual return so arranged as to enable any person to identify any particulars so published as being particulars relating to any individual person or business.
>
> . . . . .
>
> 33. Subject to the direction of the Minister, the Bureau shall collect, abstract and tabulate annually, statistics in relation to all or any of the following matters; (*a*) Population; (*b*) Births, Deaths and Marriages; (*c*) Immigration and Emigration; (*d*) Agriculture; (*e*) Education; (*f*) Public and Private Finance; (*g*) any other matters prescribed by the Minister or by the Governor in Council.

---

* A more complete account of the formation and activities of the Bureau of Statistics will be found on pp. 961-964 of the 1932-33 Year Book.

† Consolidated as the Statistics Act (c. 190, R.S.C., 1927).

As first established* the Bureau included, by transfer or absorption, the following divisions: (1) the Census and Statistics Office (covering the census, and also agriculture, general manufactures, and judicial statistics), (2) Fisheries Statistics, (3) Mining Statistics, (4) Forestry Statistics, (5) Dairying and Fruit Statistics, (6) Water- and Electric-Power Statistics, (7) the Railways and Canals Statistical Branch of the Department of Railways and Canals, (8) the Trade Statistical Branch (Exports and Imports), (9) Grain Trade Statistics, (10) Live-Stock Statistics, (11) Prices Statistics, and (12) Employment Statistics. In addition, four new branches were created, dealing, respectively, with Public Finance, Internal Trade, Vital Statistics, and Education.

Since its organization in 1918, the Bureau has created out of these many heterogeneous units a unified, nation-wide statistical system in which the correlation of the several subjects and their interpretation from a comprehensive national viewpoint has been the primary objective. By means of Dominion-Provincial statistical conferences held from time to time, a useful degree of co-operation and uniformity of statistical classification and method has been achieved and progress along these lines continues. These main advantages of statistical centralization have not only been substantially attained, but the treatment of statistics, not merely as aggregations of figures, but as primary data from which complex social and economic phenomena may be interpreted, has been emphasized. This view of a true national statistic as revealing the controlling economic forces which operate and their interplay, and the value of such a statistic in administrative planning along national lines, involves, of course, an added function of the Bureau, *viz.*, its usefulness as a national laboratory for economic and social research. This is a development which, as yet, is in its infancy but the foundation of such a service, comparable with the increasing importance of Canada in the economic and political world, has already been laid.

In the relatively short space of twenty years the Dominion Bureau of Statistics has laid the foundations for a service comparable with the increasingly important position taken by Canada in the economic and political world.

As now organized, the Branches of the Dominion Bureau of Statistics are: I. Administration; II. Demography—Census and Vital Statistics; III. Agricultural Statistics; IV. Fisheries and Animal Products; V. Mining, Metallurgical and Chemical; VI. Forestry and Allied Industries; VII. General Manufactures; VIII. External Trade (Imports and Exports); IX. Internal Trade; X. Construction; XI. Transportation and Public Utilities; XII. Financial Statistics; XIII. Judicial Statistics; XIV. Education Statistics; XV. Census of Institutions; XVI. Census Analysis and Social Statistics; XVII. General Statistics. An organization chart showing the relationship of the Branches and the divisions of their work is given at pp. 1144-1145 of the 1934-35 Year Book.

While primarily serving the Government, the Bureau realizes that in a democratic community every citizen is a part of the Government and should be well informed regarding the social and economic conditions of his country. Accordingly, the Bureau furnishes to all applicants answers to all manner of questions on all sorts of topics. In particular, it supplies to business men of all classes information regarding business conditions and statistics regarding production, imports, exports, prices, stocks, etc., of all kinds of commodities, thus enabling them to direct their operations more effectively to their own greater advantage and to the greater advantage of Canada. Special tabulations may be made, or other investigations carried out at a fee based only on the extra clerical costs to the Bureau.

---

* See the first Annual Report of the Dominion Statistician, for the fiscal year ended Mar. 31, 1919.

Publications.—Items in the vote of the Bureau, passed by Parliament each year, provide limited funds for the printing and processing of reports and bulletins. Reports printed from type are set up by the King's Printer, but the Bureau itself operates its own contact printing presses and all processed reports and bulletins are completely printed as well as published by the Bureau of Statistics.

The present policy with regard to the distribution of publications is based on sales to the public at actual cost of paper and presswork only; compilation, editing, and other overhead costs are not included. The object is to extend the service to the public as widely as possible and so spread the compilation and overhead which are the big items in total costs. A special subscription rate of $25 per year is made to firms and individuals listed to receive the "all publications" service. The charge entitles the payer to receive a copy of each publication as issued, with the exception of news bulletins. Other special rates are set for series of publications in related groups; these are referred to in the respective sections of the list following.

Applications for reports should be sent to the Bureau of Statistics; they should indicate the individual publication or series of reports in which the applicant is interested and include the necessary remittance in the form of a cheque or money order made payable to the Receiver-General of Canada, Ottawa.

ADMINISTRATION—

Annual Report of the Dominion Statistician. (Included in the Annual Report of the Department of Trade and Commerce, *Price 25 cents.)*

POPULATION—

I. CENSUS.

(A) Report of the Seventh Census of Canada, 1931:—

Vol. I. General—Administrative Report of the Seventh Census followed by a summary of the leading facts of the Censuses of Population and Agriculture, Institutions, Merchandising and Service Establishments, etc., and cross-analyses relating thereto. The Appendix gives a complete bibliography of census materials and reproduces the more salient figures for specified years, chronologically arranged, back to 1605. The volume also contains a series of life tables for the Dominion and each province. *Price, Cloth $1·50, Paper $1.*

Vol. II. Population by Local Subdivisions—Conjugal condition, racial origin, religion, birthplace, year of immigration, language, literacy, school attendance, etc. *Price, Cloth $1·50, Paper $1.*

Vol. III. Ages of the People—Classified by sex, conjugal condition, racial origin, religion, birthplace, language, literacy, year of immigration, naturalization, etc. *Price, Cloth $1, Paper 75 cents.*

Vol. IV. Birthplace, Racial Origin and Year of Immigration of the People—Classified and cross-classified by conjugal condition, naturalization and citizenship, religion, language, literacy, school attendance. *Price, Cloth $1, Paper 75 cents.*

Vol. V. Earnings of Wage-Earners, Dwellings, Households, Families, Blind and Deaf-Mutes—Cross-classified by birthplace, conjugal condition, year of immigration, naturalization and citizenship, racial origin, religion, language, literacy, school attendance. *Price, Cloth $1, Paper 75 cents.*

Vol. VI. Unemployment—Classified by industry, occupation, cause, age, sex, conjugal condition, period of idleness, birthplace, racial origin, year of immigration. *Price, Cloth $1, Paper 75 cents.*

Vol. VII. Occupations and Industries—Cross-classified by birthplace, race, age, sex, etc. *Price, Cloth $1, Paper 75 cents.*

Vol. VIII. Agriculture—Agricultural population, farm holdings and land area, tenure, value of farm property and farm products, acreage and yields of crops, live stock, mortgage indebtedness and farm expenses, farm machinery, facilities and roads, co-operative marketing, etc. *Price, Cloth $1, Paper 75 cents.*

POPULATION—continued.

I. CENSUS—continued.

(A) Report of the Seventh Census of Canada, 1931—concluded.

Vol. IX. Institutions—Hospitals for the Sick —Type, bed capacity, facilities, movement of patient population, personnel, capital investment, maintenance, receipts and expenditures, etc.; Mental Hospitals—Movement of patient population and their psychoses, age, nativity, racial origin, economic condition, conjugal condition, environment, literacy, religion, administration and personnel, etc.; Charitable and Benevolent Institutions—Type, movement of population, finances, inmates, age, sex, administration and personnel, etc.; Penitentiaries and Corrective and Reformative Institutions—Inmates, offences, sentences, age, birthplace, citizenship, racial origin, previous employment, environment, educational status, conjugal condition, social habits, overseas service, administrative staff, receipts and expenditures. *Price, Cloth $1, Paper 75 cents.*

Vols. X and XI. Merchandising and Service Establishments—Retail merchandise trade cross-classified by kind of business, type of operation, size of business, employees, salaries and wages, capital investment, rent and other operating expenses, credit, etc.; wholesale trade cross-classified by type of establishment, kind of business, operating expenses, etc.; with special reports on retail trade in urban and rural areas, chain stores, food retailing, drug stores, hotels, moving picture theatres, co-operative marketing and purchasing, etc. *Price, Cloth $1, Paper 75 cents, each Volume.*

Vols. XII and XIII. Census Monographs—Consisting of a series of studies of outstanding Canadian problems as follows: (1) Population Growth; (2) Age Distribution of the Canadian People; (3) Fertility of the Population of Canada; (4) Racial Origins and Nativity of the Canadian People; (5) Illiteracy and School Attendance in Canada; (6) Rural and Urban Composition of the Canadian People; (7) The Canadian Family; (8) Housing and Rentals in Canada; (9) Dependency of Youth; (10) Occupational Structure of the Canadian People; (11) Unemployment; (12) Population Basis of Agriculture; (13) Canadian Life Tables, 1931. Nos. 4, 5, 6, 7, 9, 11, and 13 are already published as separates; the remainder are in course of preparation. *Price of each monograph, 35 cents, except Nos. 11 and 13, which are 50 cents each.*

AGRICULTURE.—

Farm population, areas, tenure, values, facilities and live stock; value of field crops, vegetables, fruits and forest products: published separately for each province. *Price 25 cents each.*

(B) Bulletins of the Seventh Census of Canada, 1931:—

(1) POPULATION.—*Final Bulletins.*—(XI) Rural and Urban Population for Canada and Provinces. (XIII) Cities, Towns and Villages in Canada, by Provinces. (XVI) Ages, by Provinces. (XIX) Radio Sets in Canada, 1931. (XXVI) Age Distribution by Single Years of Age for Canada, by Provinces, 1931. (XXVII) Immigrant Population Classified by Sex, Country of Birth, Province of Residence, Years of Arrival in Canada, and Citizenship of the Foreign Born, 1931. (XXVIII) Gainfully Employed Ten Years of Age and Over, Classified According to Occupation and Sex for Cities of 30,000 and Over, 1931. (XXIX) Birthplace of the Population Classified According to Nativity of Parents for Canada and Provinces, 1931. (XXX) Canadians and other Nationals. (XXXI) Gainfully Employed Ten Years of Age and Over for Canada and Provinces, 1931. (XXXII) Literacy, Language Spoken, and Conjugal Condition of the Population Ten Years of Age and Over, 1931. (XXXIII) Earnings Among Wage-Earners for Canada and Provinces, 1931. (XXXIV) Ages of the Gainfully Employed Ten Years of Age and Over, for Canada and Provinces, 1931. (XXXVII) Age Distribution by Five-Year Age Groups for Cities, Towns and Villages of 5,000 Population and Over, 1931. (XXXVIII) Population of the Municipal Wards of Montreal City by Quinquennial Age Groups, Conjugal Condition, Birthplace, Racial Origin, Religion, School Attendance and Literacy, by Sex, 1931. (XXXIX) Houses and Dwellings. (XL) Population of the Municipal Wards of the Cities of Toronto, Vancouver, Winnipeg, Hamilton, Quebec, and Ottawa by Quinquennial Age Groups, Conjugal Condition, Birthplace, Racial Origin, Religion, School Attendance and Literacy, by Sex, Census of 1931. (XLI) Orientals, Ten Years of Age and Over, Gainfully Employed by Race, Occupation and Sex, in British Columbia, 1931. (XLII) Persons Speaking Gaelic. (XLIII) Blind. (XLIV) Deaf Mutes. (XLV) Racial Origins of Gainfully Occupied, Ten Years of Age and Over for Canada and the Provinces. (XLVI) Birthplaces of Gainfully Occupied Ten Years of Age and Over, for Canada and the Provinces, 1931. (XLVII) Conjugal Condition of Gainfully Occupied Females, Fifteen Years of Age and Over, for Canada and the Provinces, 1931. Distribution of Occupations by Industry. Unemployment and Earnings Among Wage-Earners—

POPULATION—continued.

I. CENSUS—concluded.

(B) Bulletins of the Seventh Census of Canada, 1931:—concluded.

(1) Population.—*Final Bulletins.*—concluded.

(I) Saint John, N.B.; (II) Winnipeg, Man.; (III) Kitchener, Ont.; (IV) Ottawa, Ont.; (V) Vancouver, B.C.; (VIII) Toronto, Ont.; (IX) Montreal, Que. Occupational Trends in Canada, 1891-1931. *Reprints.*—Population 1871-1931. Age distribution. Earnings of Wage-earners.

[Note.—*For Census monographs on population, see under Vols. XII and XIII, p. 1109.*]

(2) Agriculture.—*Final Bulletins.*—Animal Products on Farms, by Counties—(VII) Ontario; (VIII) Quebec; (IX) British Columbia. Live Stock on Farms, by Counties—(X) Prince Edward Island; (XI) Nova Scotia; (XII) New Brunswick; (XIII) Manitoba; (XIV) Saskatchewan; (XV) Alberta; (XVI) British Columbia; (XVII) Ontario; (XX) Stock Sold Alive, Stock Slaughtered, Young Animals Raised, 1930, and Pure-Bred Live Stock on Farms, 1931, by Counties or Census Divisions. (XXIV) Forest Products of Farms, by Counties or Census Divisions, 1930. (XXV) Condition of Farm Land, by Counties or Census Divisions, 1931. (XXVI) Area of Field Crops, by Counties or Census Divisions, 1931.

(C) Bulletins of the Quinquennial Census of the Prairie Provinces, 1936:—

Preliminary Bulletins.—(I) Population of Certain Cities, Towns and Villages. (II) Population of Certain Cities, Towns and Villages. (III) Population of Certain Cities, Towns and Villages and Electoral Districts. (IV) Population of Certain Electoral Districts, Towns and Villages. (V) Number of Occupied and of "Vacant" or "Abandoned" Farms in Certain Electoral Districts. (VI) Population of Certain Electoral Districts and Cities, Towns and Villages. (VII) Area under Field Crops in 1936 in Certain Electoral Districts. (VIII) Population of Certain Electoral Districts and Cities, Towns and Villages. (IX) Population of Rural Municipalities in the Provinces of Manitoba, Saskatchewan, and Alberta. (X) Population of Certain Electoral Districts and Cities, Towns and Villages. (XI) Number of Occupied and of "Abandoned" or "Vacant" Farms in Certain Electoral Districts. (XII) Population of Certain Electoral Districts, Rural Municipalities, Cities, Towns and Villages. (XIII) Population of Electoral Districts in the Provinces of Manitoba, Saskatchewan, and Alberta. (XIV) Preliminary Announcement of Unemployment and Employment among Wage-Earners, in Cities and Towns of 5,000 Population and Over. (XV) Area under Field Crops in the Prairie Provinces, 1936 and 1931. (XVI) Number of Live Stock on Farms on June 1, 1936, in the Prairie Provinces. (XVII) Preliminary Announcement of Unemployment and Employment among Wage-Earners in Urban Centres of 1,000 to 5,000 Population. (XVIII) Preliminary Announcement of Unemployment and Employment among Wage-Earners in the provinces of Manitoba, Saskatchewan, and Alberta. (XIX) Number of Farms in the Prairie Provinces by Census Divisions. (XXII) Preliminary Report on Agriculture for the Province of Manitoba, *Price 15 cents.* (XXV) Preliminary Report on Agriculture for the Province of Saskatchewan, *Price 15 cents.* (XXVIII) Preliminary Report on Agriculture for the Province of Alberta, *Price 15 cents. Final Bulletins.*—(XX) Population by Townships, Rural and Urban, by Census Divisions, Age, Sex, Conjugal Condition, Birthplace, Racial Origin, Official Language, Immigration, School Attendance, Literacy, for cities of 10,000 population and over, *Price 25 cents.* (XXI) Occupations and Industries of Gainfully Occupied for Cities of 10,000 Population and Over, *Price 25 cents.* (XXIII) Population Classifications by Provinces, *Price 25 cents.* (XXIV) Unemployment Among Wage-Earners for Cities of 10,000 Population and Over, *Price 25 cents.* (XXVI) Earnings and Employment among Wage-Earners for Cities of 10,000 Population and Over, *Price 25 cents.* (XXVII) Occupations and Industries of Gainfully Occupied for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXIX) Unemployment among Wage-Earners for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXX) Unemployment and Earnings among Wage-Earners on Relief and Not on Relief for Cities of 30,000 Population and Over, *Price 25 cents.* (XXXI) Earnings and Employment among Wage-Earners for the Provinces of Manitoba, Saskatchewan and Alberta, *Price 25 cents.* (XXXII) Earnings of Wage-Earner Heads by Tenure and Size of Family for Cities of 10,000 Population and Over, *Price 25 cents.* (XXXIII) Occupations in Relation to Length of School Life for the Provinces of Manitoba, Saskatchewan, and Alberta, *Price 25 cents.* (XXXIV) Buildings, Dwellings, Households and Rent, by Size of Dwelling, for the Provinces of Manitoba, Saskatchewan, and Alberta, *Price 25 cents.* (XXXV) Types of Farming, *Price 25 cents.*

II. INTERCENSAL ESTIMATES OF POPULATION.

POPULATION—concluded.

III. VITAL STATISTICS.

Annual Report on Vital Statistics of Canada by Provinces and Municipalities, *Price $1;* Preliminary Annual Report on Vital Statistics of Canada, *Price 25 cents;* Preliminary Quarterly Report on Vital Statistics of Canada, *Price 50 cents per year;* Monthly Report of Births, Deaths, and Marriages registered in Cities, *Price 50 cents per year;* Special Report on Contributory Causes of Death, 1926; Order of Birth in the Registration Area of Canada, 1925; Manual of the International List of Causes of Death, Revision of 1929 (limited edition); Special Report on Mortality in Canada from Cerebral Hæmorrhage and Certain Diseases of the Heart, Arteries and Kidneys, 1921-32; Special Report on Mortality in Canada According to Place of Residence, 1930-32; Special Report on Mortality from Tuberculosis in Canada According to Place of Residence, 1930-32; Special Report on Births in Canada According to Place of Residence of Mother, 1930-32; Special Report on Mortality in Canada, 1921-32; Handbook on Death Registration and Certification, containing International List of Causes of Death (special distribution); Special Report on Mortality in Canada, 1921-35, *Price 25 cents;* Special Report on Occupational Mortality in Canada, 1931-32, *Price 25 cents;* Special Report on Deaths in Canada, Classified According to Residence of Decedents, 1935 (Parts I and II), *Price, each part, 25 cents*; Special Report on Deaths in Canada, Classified According to Residence of Decedents, 1936 (Parts I, II, and III), *Price, each part, 25 cents.*

PRODUCTION—

I. ANNUAL SURVEY OF PRODUCTION.

Including and differentiating gross and net values—(1) Primary Production (agriculture, forestry, fisheries, trapping, mining, and electric power), (2) Secondary Production (general manufactures, custom and repair, and construction), and (3) Provincial and Per Capita Analyses, Explanation of Method, *Price 25 cents.*

II. AGRICULTURE.

(1) Agricultural Production—Monthly Bulletin of Agricultural Statistics with Table of Contents and Index, *Price $1 per year.* (The official record of current statistical data relating to agriculture. Contains reports on crop conditions, prices, weather, etc.—estimates of areas, yields, quality, and value of field crops—value of farm lands—wages of farm help—number and values of farm live stock and poultry—dairying—fruit—eggs—tobacco—apiculture—maple products—clover and grass seed—miscellaneous crops—stocks of grain—annual summary of value of agricultural production—index numbers of agricultural prices, production, and values—international agricultural statistics.) Reprinted from the Monthly Bulletin of Agricultural Statistics: *(a)* The Fertilizer Trade in Canada; *(b)* Farm Expenditures in Alberta and Saskatchewan, 1934; *(c)* Fruit Statistics of Canada, 1926-35. Agricultural Statistics by Counties and Crop Districts, 1926-30. Annual Statistics of Fruit, Nursery Stock and Floriculture. Handbook of Instructions to Crop Correspondents, and Summary of Annual Agricultural Statistics. Crop Reports—released on dates listed in the Crop-Reporting Program covering: *(a)* Intentions to Plant Field Crops; *(b)* Winter-killing and Spring Condition of Fall Wheat, Fall Rye, and Hay and Clover Meadows; *(c)* Progress of Spring Seeding; *(d)* Acreage, Condition, Yield, Stocks on Hand, and Value of Field Crops, *(e)* Telegraphic Crop Reports, June-September, weekly for the Prairie Provinces, and every second week for all Canada, *Price $2 per year.* Monthly Condition Reports (seasonal) with preliminary estimates of Production for: *(a)* Fruit and Vegetables, *Price $1 per year; (b)* Tobacco, Annual Survey of Production and Marketing of Commercial Tobacco Crop, *Price 25 cents.* (See also Census of Agriculture under "Population".)

(2) Grain and Grain Products—(a) Annual Report on the Grain Trade of Canada, *Price 50 cents; (b)* Monthly Review of the Wheat Situation, *Price $1 per year; (c)* Canadian Grain Statistics (weekly report on grain supplies and movements), *Price $2 per year; (d)* Canadian Milling Statistics (monthly), *Price 50 cents per year; (e)* List of Mills with Capacity, *Price 50 cents; (f)* The Grain Situation in Argentina (monthly), *Price $1 per year; (g)* The Production and Distribution of Canadian Grains and Seeds—(1) Barley, (2) Oats, (3) Rye, (4) Flaxseed; *(h)* World Trade in Barley, *Price 50 cents; (i)* World Shipments of Wheat and Wheat Flour, 1926-27 to 1931-32; *(j)* Salient Features in the Grain Situation in Canada; *(k)* Trends in World Wheat Acreage, with graphic appendix.

(3) Live-Stock and Animal Products—(a) Annual Report on Live-stock and Animal Products Statistics, *Price 25 cents; (b)* Monthly Report on Cold Storage Holdings in Canada (1) Meat and Lard, *Price $1 per year*, (2) Fish, *Price $1 per year*, (3) Dairy and Poultry Products, *Price $1 per year*, (4) Canadian Fruit and Vegetables, *Price 50 cents per year; (c)* Monthly Reports on Stocks of Butter, Cheese, and Eggs in the Principal Cities of Canada, *Price 50 cents per year; (d)* Monthly Review of Dairy Production, *Price $1 per year; (e)* Annual Estimates of the Consumption of Meats,

PRODUCTION—continued.

II. AGRICULTURE—concluded.

(3) *Live-Stock and Animal Products*—concluded.

Poultry, Butter, Cheese, and Eggs; *(f)* Annual Report on Dairying Statistics of Canada, *Price 25 cents; (g)* Annual Surveys of Live Stock and Poultry at June 1 and Dec. 1, *Price 25 cents; (h)* Annual Report on Production of Poultry and Eggs, *Price 25 cents; (i)* Annual Summary of Cold Storage Holdings, *Price 25 cents; (j)* The Dairy Situation in Canada (quarterly), *Price $1 per year.*

(4) *Other*—Monthly Report on Raw and Refined Sugar (visible supply, meltings, shipments, exports and imports), *Price $1 per year.* Annual Summary of Sugar Reports. Production and Value of Honey and Beeswax, 1924 to 1938. Annual Report on the Agricultural Situation and Outlook (published in co-operation with the Department of Agriculture) with supplements as follows: *(a)* The Potato Situation in Eastern Canada, 1935; *(b)* Production Trends and Policies in Agriculture, 1936; *(c)* Charts, 1937. Statistical Supplements 1938 and 1939. Report of the Conference on Agricultural Statistics, Ottawa, Mar. 30-Apr. 2, 1936.

NOTE.—*Subscription price for all publications of the Agricultural Branch, $10 per year.*

III. FURS.

Annual Report on Fur Farms, *Price 25 cents.* List of Companies, Firms, and Individuals Engaged in Fur Farming in Canada, *Price $5.* Advance Bulletin of Statistics of the Production of Raw Furs, *Price 10 cents.* Annual Bulletin of the Production of Raw Furs (comprising the pelts taken by trappers and those sold from fur farms), *Price 25 cents.*

IV. FISHERIES.

Annual Report of Fisheries Statistics, *Price 50 cents.* Advance Bulletins of Fish Caught and Marketed, by Provinces: Prince Edward Island, *Price 10 cents;* Nova Scotia, *Price 10 cents;* New Brunswick, *Price 10 cents;* Quebec, *Price 10 cents;* Ontario, The Prairie Provinces, and Yukon, *Price 10 cents;* British Columbia, *Price 10 cents;* Canada, *Price 20 cents.*

V. FORESTRY.

Annual Summary of the Value, etc., of Forest Production (includes operations in the woods for sawmills, shingle mills, pulp and paper mills, etc., production of mining timber, production of poles and cross ties, and farm production of firewood, posts, etc.), *Price 25 cents.*

[*See also Reports on Manufactures of Forest Products listed under "Manufactures", Section VII, Subsection (5).*]

VI. MINERAL PRODUCTION (MINING AND METALLURGY).

(1) *General—(a)* Annual Report on the Mineral Production of Canada, *Price 50 cents; (b)* Preliminary Reports (semi-annual) on the Mineral Production of Canada, *Price 25 cents; (c)* Monthly Reports on Leading Minerals—reports on gold, silver-lead-zinc, nickel-copper, petroleum-natural gas production, cement-clay products, *Yearly subscription $1 per report;* Reports on gypsum, salt, asbestos, feldspar. *Yearly subscription 50 cents per report; (d)* Preliminary Estimate of Canada's Mineral Production, *Price 25 cents.*

(2) *Coal—(a)* Annual Report on Coal Statistics for Canada, *Price 50 cents; (b)* Monthly Summary Report on Coal and Coke Statistics for Canada, *Price $1 per year; (c)* Quarterly Report on Coal and Coke Statistics for Canada, *Price 50 cents per year.*

(3) *Annual Bulletins on Mining*—Metals—The Gold-Mining Industry in Canada (including alluvial gold mining, auriferous quartz mining, copper-gold-silver mining, and tables showing Canadian and world production of gold), *Price 50 cents.* The Silver-Mining Industry in Canada (including silver-cobalt-arsenic mining, silver lead-zinc mining, and tables showing Canadian and world production of arsenic, cobalt, lead, silver, and zinc), *Price 25 cents.* The Nickel-Copper Mining, Smelting and Refining Industry (including Canadian and world production of nickel, platinum metals and copper), *Price 25 cents.* The Production of Miscellaneous Metals (including aluminium, antimony, barium, beryl, bismuth, cadmium, calcium, chromite, lithium, magnesium, manganese, mercury, molybdenite, radium, selenium, tin, titanium, tungsten), *Price 50 cents.* The Non-Ferrous Smelting and Refining Industry, *Price 25 cents. The complete Mining Series of Reports (with the exception of Coal), Price $7.*

Non-Metals—Abrasives, *Price 15 cents;* Asbestos, *Price 25 cents;* Feldspar and Quartz, *Price 25 cents;* Gypsum, *Price 25 cents;* Iron Oxides, *Price 15 cents;* Mica, *Price 25 cents;* Natural Gas, *Price 25 cents;* Petroleum, Crude, *Price 25 cents;* Salt, *Price*

PRODUCTION—continued.

VI. Mineral Production (Mining and Metallurgy)—concluded.

(3) Annual Bulletins on Mining—Non-Metals—concluded.

25 cents; Talc and Soapstone, *Price 15 cents;* Miscellaneous Non-Metallic Minerals (including actinolite, barytes, bituminous sands, fluorspar, graphite, magnesitic-dolomite, magnesium sulphate, bog manganese, mineral waters, peat, phosphate, silica brick, sodium carbonate, sodium sulphate, sulphur-pyrites), *Price 50 cents.*

Structural Materials—The Cement Industry, *Price 25 cents;* Clay and Clay Products, *Price 25 cents;* Lime, *Price 25 cents;* Sand and Gravel, *Price 25 cents;* Stone, *Price 25 cents.*

[*See also Reports on Iron and Steel and Their Products, Manufactures of Non-Ferrous Metals, the Manufactures of Non-Metallic Minerals and Chemicals, and Allied Products listed under "Manufactures", Section VII, Subsections (6), (7), (8) and (9).*]

Note.—*Subscription price for all Mining, Metallurgical and Chemical reports* [*including reports under groups (6), (7), (8), and (9), pp. 1114-1115*]. *$15 per year.*

VII. Manufactures.

(1) General—General Report on the Manufacturing Industries of Canada, *Price 50 cents.* Geographical Distribution of the Manufacturing Industries of Canada, *Price 50 cents;* also Reports for the Provinces and Leading Cities: Quebec, *Price 25 cents;* Ontario, *Price 25 cents;* British Columbia, *Price 25 cents;* Prairie Provinces, *Price 25 cents;* Maritime Provinces, *Price 25 cents.* Alphabetical List of Products (annual report); Quantity of Manufacturing Production in Canada, 1923-29; Consumption of Luxuries (periodic report).

(2) Manufactures of Vegetable Products—General Report on Manufactures of Vegetable Products, *Price 50 cents.* Annual bulletins as follows: *(a)* Coffee, Tea, Spices and Miscellaneous Foods, *Price 25 cents; (b)* Fruit and Vegetable Preparation, including Canning, Evaporating and Preserving, and Pickles, Sauces, Vinegar and Cider, *Price 25 cents; (c)* Flour and Grist Mill Products, *Price 25 cents; (d)* Bread and Other Bakery Products, *Price 25 cents; (e)* Biscuits and Confectionery, including Cocoa and Chocolate, *Price 25 cents; (f)* Macaroni and Vermicelli, *Price 15 cents; (g)* Distilled Liquors, *Price 25 cents; (h)* Breweries, *Price 25 cents; (i)* Wine, *Price 25 cents; (j)* Rubber Industry, *Price 25 cents; (k)* Prepared Breakfast Foods, *Price 15 cents; (l)* Sugar Refineries, *Price 25 cents; (m)* Tobacco Products, *Price 25 cents; (n)* Linseed Oil and Soya Bean Oil, *Price 15 cents; (o)* The Canned Foods Industry, *Price 25 cents; (p)* Ice Cream, *Price 15 cents; (q)* Pack of Fruits and Vegetables, (preliminary), *Price 10 cents; (r)* Stocks of Unmanufactured Tobacco on Hand, (quarterly report), *Price $1; (s)* Stocks of Canned Fruits and Vegetables, (quarterly report), *Price $1; (t)* Aerated and Mineral Waters, *Price 25 cents; (u)* Stock and Poultry Foods, *Price 15 cents.*

(3) Animal Products and Their Manufactures—Annual Report as follows: The Dairy Factory Industry, *Price 25 cents.* Annual bulletins: *(a)* Slaughtering and Meat Packing and Sausage and Sausage Casings, *Price 25 cents; (b)* Process Cheese, *Price 10 cents; (c)* Leather Tanneries, *Price 25 cents; (d)* Miscellaneous Leather Goods, Leather Belting, Leather Boot and Shoe Findings, *Price 25 cents; (e)* Leather Boots and Shoes, *Price 25 cents; (f)* Leather Gloves and Mittens, *Price 20 cents; (g)* Fur Goods and Fur Dressing, *Price 25 cents.* Monthly bulletin on Boot and Shoe Production, *Price $1 per year* (including annual). Monthly bulletin on Concentrated Milk Products, *Price $1 per year.*

(See also Reports on Live Stock, etc., listed under "Agriculture".)

(4) Textile and Allied Industries—General Report on the Textile Industries of Canada, *Price 50 cents.* Annual Bulletins as follows: *(a)* Cotton Textiles (cloth, yarn, thread and waste), *Price 50 cents; (b)* Woollen Textiles (cloth, yarn, waste, carpets, and woollen goods, *n.e.s.*), *Price 50 cents; (c)* The Silk Industry, *Price 25 cents; (d)* Men's Factory Clothing, *Price 25 cents; (e)* Women's Factory Clothing, *Price 25 cents; (f)* Hats and Caps, *Price 25 cents; (g)* Hosiery and Knitted Goods, *Price 25 cents, (h)* Men's Furnishings, *n.e.s.*, *Price 25 cents; (i)* Oiled Clothing and Waterproofs, *Price 15 cents; (j)* Cordage, Rope and Twine, *Price 15 cents; (k)* Corsets, *Price 15 cents; (l)* Cotton and Jute Bags, *Price 15 cents; (m)* Dyeing and Finishing of Textiles, *Price 15 cents; (n)* Awnings, Tents and Sails, *Price 15 cents.*

(5) Manufactures of Forest Products—Printed Reports, *Price 50 cents each; (a)* The Lumber Industry; *(b)* The Pulp and Paper Industry; *(c)* Wood-Using Industries; *(d)* Paper-Using Industries. Annual bulletins: *(a)* The Lumber Industry, *Price 35 cents; (b)* Lumber Distribution in Canada and the United States (biennial), *Price 35 cents; (c)* The Pulp and Paper Industry, *Price 30 cents; (d)* Wood-Using Industries (Summary), *Price 35 cents.* Annual Preliminary Reports on Wood-Using Industries: *(a)* Planing Mills, Sash and Door Factories, *Price 20 cents;*

PRODUCTION—continued.

VII. Manufactures—continued.

(5) *Manufactures of Forest Products*—concluded.

(b) Hardwood Flooring, *Price 15 cents; (c)* Furniture, *Price 15 cents; (d)* Boxes, Baskets and Crates, *Price 15 cents; (e)* Carriages, Sleighs and Vehicle Supplies, *Price 15 cents; (f)* Cooperage, *Price 10 cents; (g)* Coffins and Caskets, *Price 10 cents; (h)* The Wooden Refrigerator Industry, *Price 10 cents; (i)* Boat Building, *Price 10 cents; (j)* Lasts, Trees and Shoe Findings, *Price 10 cents; (k)* Handles, Spools and Woodturning, *Price 10 cents; (l)* Wooden-ware, *Price 10 cents; (m)* Excelsior, *Price 10 cents; (n)* Charcoal Manufacture, *Price 10 cents; (o)* Beekeepers' and Poultrymen's Supplies, *Price 10 cents; (p)* Miscellaneous Wood-Using Industries, *Price 10 cents.* Annual Preliminary Reports on Paper-Using Industries: *(a)* The Printing Trades (comprising the following industries: Printing and Publishing; Printing and Bookbinding; Lithographing; Engraving, Stereotyping and Electrotyping; Trade Composition; and Blue Printing), *Price 35 cents; (b)* Paper Boxes and Bags, *Price 25 cents; (c)* Roofing Paper, *Price 10 cents; (d)* Miscellaneous Paper Goods, *Price 10 cents.* Monthly bulletins: *(a)* Asphalt Roofing Production, *Price 50 cents per year; (b)* Asphalt Roofing Sales, *Price 50 cents per year; (c)* Rigid Insulating Board, *Price 50 cents per year.*

Note.—*Subscription price for all Forestry Branch publications $5 per year.*

(6) *Iron and Steel and Their Products*—Biennial Report, *Price 50 cents.* Annual bulletins as follows: Preliminary Summary on the Iron and Steel Industry—*(a)* Primary Iron and Steel, *Price 15 cents; (b)* Castings and Forgings, *Price 25 cents; (c)* Heating and Cooking Apparatus, *Price 15 cents; (d)* Boilers, Tanks and Engines, *Price 25 cents; (e)* Farm Implements and Machinery, *Price 25 cents; (f)* Automobile Parts and Accessories, *Price 25 cents; (g)* Automobile Statistics for Canada, *Price 50 cents; (h)* Railway Rolling-Stock, *Price 25 cents; (i)* Wire and Wire Goods, *Price 25 cents; (j)* Sheet Metal Products, *Price 25 cents; (k)* Hardware, Tools and Cutlery, *Price 25 cents; (l)* Bridge Building and Structural Steel, *Price 25 cents; (m)* Miscellaneous Iron and Steel Products, *Price 25 cents; (n)* Machinery, *Price 25 cents; (o)* Bicycles, *Price 15 cents; (p)* Aircraft, *Price 15 cents; (q)* Shipbuilding, *Price 15 cents; (r)* Iron and Steel and Their Products (final summary), *Price 10 cents.* Commodity bulletins on the production of pig iron, steel, washing machines, cream separators, warm air furnaces, galvanized sheets, wire nails, wire rope and cable, steel wire, wire fencing, stoves, etc. Monthly Reports: *(a)* Pig Iron, Steel, and Ferro-Alloys, *Price $1 per year; (b)* Automobile Statistics for Canada, *Price $1 per year; (c)* Steel Ingots, *Price $1 per year.* Quarterly Report on Galvanized Sheets, *Price $1 per year.*

(7) *Manufactures of Non-Ferrous Metals*—Biennial Report, *Price 50 cents.* Annual bulletins as follows: *(a)* Aluminium Products, *Price 15 cents; (b)* Brass and Copper Products, *Price 25 cents; (c)* White Metal Alloys, *Price 25 cents; (d)* Jewellery and Silverware, *Price 25 cents; (e)* Electrical Apparatus and Supplies, *Price 50 cents; (f)* Miscellaneous Non-Ferrous Metal Products, *Price 15 cents; (g)* Non-Ferrous Smelting and Refining, *Price 25 cents; (h)* Manufactures of the Non-Ferrous Metals (final summary), *Price 10 cents.* Quarterly reports on production and sales of radio sets, *Price $1 per year.* Quarterly reports on sales of storage batteries, *Price 50 cents per year.* Commodity bulletins on the production of batteries, silverware, vacuum cleaners, electric motors and generators, electric transformers, incandescent lamps, etc.

(8) *Manufactures of Non-Metallic Minerals*—Biennial Report, *Price 50 cents.* Annual bulletins as follows: Preliminary Summary on Manufactures of Non-Metallic Minerals—*(a)* The Asbestos Mining Industry and the Asbestos Products Industry, *Price 25 cents; (b)* The Cement Industry, *Price 25 cents; (c)* Coke and Gas, *Price 25 cents; (d)* Glass (blown, cut, and ornamental, etc.), *Price 15 cents; (e)* Lime, *Price 25 cents; (f)* Petroleum Products, *Price 50 cents; (g)* Clay and Clay Products, *Price 25 cents; (h)* Salt, *Price 25 cents; (i)* Sand-Lime Brick, *Price 15 cents; (j)* Stone (primary, monumental, and ornamental), *Price 25 cents; (k)* Abrasives, *Price 15 cents; (l)* Miscellaneous Non-Metallic Mineral Products (including carbon electrodes —gypsum products—mica products—non-metallic minerals, *n.e.s.), Price 15 cents.* Non-Metallic Mineral Products (final summary), *Price 10 cents.* Special Report on the Consumption of Coke in Canada, *Price 25 cents.* Monthly Report on Coal and Coke Statistics, *Price $1 per year.*

(9) *Chemicals and Allied Products*—Biennial Report, *Price 50 cents.* Annual bulletins as follows: Preliminary Summary on Chemicals and Allied Products—*(a)* Coal Tar Distillation, *Price 15 cents; (b)* Acids, Alkalies and Salts, *Price 15 cents; (c)* Compressed Gases, *Price 15 cents; (d)* Fertilizers, *Price 15 cents; (e)* Medicinal and Pharmaceutical Preparations, *Price 25 cents; (f)* Paints, Pigments and Varnishes, *Price 25 cents; (g)* Soaps, Cleaning Preparations and Washing Compounds, *Price 25 cents; (h)* Toilet Preparations, *Price 25 cents; (i)* Inks, *Price 15 cents; (j)* Adhesives, *Price 15 cents; (l)* Polishes and Dressings, *Price 15 cents; (m)* Hardwood Distillation,

PRODUCTION—concluded.

VII. Manufactures—concluded.

(9) Chemicals and Allied Products—concluded.

Price 15 cents; (n) Miscellaneous Chemical Products (including boiler compounds—cellulose products—insecticides—sweeping compounds—disinfectants—matches—dyes and colours—chemical products, *n.e.s.), Price 15 cents.* Special Report on the Fertilizer Trade in Canada, *Price 25 cents.* Commodity bulletins on Sulphuric Acid, Ammonium Sulphate, etc. Special Reports—Directory of Chemical Industries in Canada, as of Jan. 1, 1938, *Price $1.* Consumption of Chemicals in Municipal Waterworks in Canada, 1936 and 1937, *Price 25 cents.*

(10) Miscellaneous Manufactures—General Report, *Price 25 cents.* Annual Bulletins as follows: *(a)* Brooms, Brushes and Mops, *Price 15 cents; (b)* Musical Instruments (including pianos, organs and phonographs) and Musical Instrument Materials and Parts, *Price 15 cents; (c)* Buttons, *Price 15 cents; (d)* Bed Springs and Mattresses, *Price 15 cents; (e)* Sporting Goods, *Price 15 cents.*

Note.—*For statistics of water power and central electric stations, see under heading "Public Utilities", p. 1117.*

VIII. Construction.

Building Permits—Monthly and Annual Record, *Price $1 per year.* Annual Report, The Construction Industry in Canada, *Price 25 cents.*

EXTERNAL TRADE (IMPORTS AND EXPORTS)—

(1) Annual Report of the Trade of Canada, for the fiscal year ended Mar. 31 (showing summary historical tables, analyses of current trends, detailed tables by items, group analyses according to component material, origin and degree of manufacture, and purpose, and comparisons of the volume of trade), *Price $3.*

(2) Condensed Preliminary Report of the Trade of Canada, for the fiscal year ended Mar. 31, *Price 25 cents.*

(3) Annual Report of the Trade of Canada for the calendar year, *Price 50 cents. (Free to subscribers to Quarterly Trade Report.)*

(4) Review of Canada's Foreign Trade during the calendar year, *Price 25 cents.*

(5) Quarterly Report of the Trade of Canada (showing statistics of imports and exports by months and cumulative quarters), *Price $2 per year.*

(6) Monthly Summary of the Trade of Canada (for latest month and latest 12 months), *Price $1 per year.*

(7) Monthly bulletins on Trade Statistics as follows: *(a)* Abstract of Imports, Exports, and Duty Collected (by latest month, accrued period, and latest 12 months), *Price 75 cents per year; (b)* Summary of Canada's Imports (for latest month), *Price 75 cents per year; (c)* Summary of Canada's Exports (for latest month), *Price 75 cents per year; (d)* Canada's Imports from Principal Countries (for latest month and accrued period), *Price 75 cents per year; (e)* Canada's Domestic Exports to Principal Countries (for latest month and accrued period), *Price 75 cents per year; (f)* Canada's Monthly Trade Trends with Empire Countries (by months and accrued period), *Price 75 cents per year. The complete series in this section (7) may be obtained for $2 per year.*

(8) Monthly Commodity Bulletins: *(a)* Imports and Exports of Asbestos; *(b)* Imports and Exports of Coffee and Tea; *(c)* Imports of Farm Implements and Machinery; *(d)* Exports of Farm Implements and Machinery; *(e)* Imports and Exports of Fertilizers; *(f)* Imports and Exports of Footwear (except rubber); *(g)* Exports of Grain and Flour; *(h)* Imports and Exports of Hides and Skins; *(i)* Imports of Lumber; *(j)* Exports of Lumber; *(k)* Imports of Meats, Lard and Sausage Casings; *(l)* Exports of Meats, Lard and Sausage Casings; *(m)* Imports of Milk, Milk Products and Eggs; *(n)* Exports of Milk, Milk Products and Eggs; *(o)* Imports of Non-Ferrous Metals and Smelter Products; *(p)* Exports of Non-Ferrous Metals and Smelter Products; *(q)* Imports of Paints and Varnishes; *(r)* Exports of Paints and Varnishes; *(s)* Imports of Petroleum and Products; *(t)* Exports of Petroleum and Products; *(u)* Imports and Exports of Pipes, Tubes and Fittings; *(v)* Imports of Pulpwood, Pulp and Paper; *(w)* Exports of Pulpwood, Pulp and Paper; *(x)* Imports of Rubber and Products; *(y)* Exports of Rubber and Products; *(z)* Imports of Sheet Metal Products; *(aa)* Imports and Exports of Vegetable Oils; *(bb)* Imports of Vehicles (of iron); *(cc)* Imports and Exports of Wire; *(dd)* Imports and Exports of Soap; *(ee)* Imports and Exports of Fresh Fruits; *(ff)* Imports and Exports of Fresh Vegetables; *(gg)* Imports and Exports of Pickles and Canned Vegetables; *(hh)* Imports and Exports of Canned and Preserved Fruits; *(ii)* Imports of Animals, Living; *(jj)* Exports of Animals, Living; *(kk)* Imports and Exports of Toilet Preparations. *Price $1 per year for imports and exports of one commodity.*

EXTERNAL TRADE (IMPORTS AND EXPORTS)—concluded.

(9) Special Trade Reports: *(a)* Trade of Canada with Pacific Countries (1932); *(b)* Canada-Belgium Trade, 1933; *(c)* Canada's Imports of Commodities not produced in Canada, 1929-1933; *(d)* Canada-Austria Trade, 1934; *(e)* Canada-Germany Trade, 1934.

NOTE.—*Subscription price for all External Trade Branch publications $15 per year.*

INTERNAL TRADE—

1. RETAIL AND WHOLESALE TRADE (See Vols. X and XI under *Report of the Seventh Census*, p. 1109):—

(a) Census of Merchandising and Service Establishments, 1931:—

Final Reports (printed)—Retail trade for the Dominion and the provinces, showing number of establishments, kinds of business, types of operation, full-time and part-time employees and wages, operating expenses, size of business, credit sales, forms of organization, capital invested, and sales by commodities; details for cities with populations of 30,000 and over by kinds of business, and types of operation, and by kinds of business for counties or census divisions and incorporated places with populations of 1,000 and over. Retail Trade, Canada, *Price 50 cents;* Ontario, *Price 50 cents;* Quebec, *Price 50 cents;* similar reports for each of the other provinces, *Price 25 cents each.* Reports on wholesale trade similar in form and scope to the retail series. Wholesale Trade in Canada, *Price 25 cents;* similar reports for each of the five economic divisions of the country, *Price 25 cents each.* Census of Canada, 1931, Vol. X—comprises the merchandising statistics contained in the retail series together with an analysis of results and special tables showing commodity sales; Vol. XI—comprises (1) statistics on retail services contained in the retail trade series, (2) all statistics on wholesale trade, (3) special sections dealing with retail chains, hotels, and distribution of sales of manufacturing plants, (4) analysis of results. *Price, Cloth $1, Paper 75 cents for each volume.*

(b) Annual Reports (processed)—Estimates of the total retail and wholesale trade, by provinces and by kinds of business. Retail Trade in Canada, *Price 25 cents.* Separate reports for the five economic divisions, *Price 10 cents each.* Wholesale Trade in Canada and the Provinces, *Price 10 cents.* Miscellaneous Results on Retail Trade (gross margins, stocks, payroll, accounts outstanding), *Price 10 cents.* Similar report on wholesale trade, *Price 10 cents.* Retail Chains in Canada, *Price 25 cents.* Food Chains in Canada, *Price 10 cents.* Motion Picture Theatres, *Price 25 cents.* Power Laundries and Cleaning and Dyeing Establishments, *Price 25 cents.* Sales of Farm Implements and Equipment, *Price 15 cents.* Sales of Motor Vehicles and Motor Vehicle Financing (summary of monthly series), *Price 25 cents.*

(c) Monthly Reports—Monthly Indexes of Wholesale Sales, Monthly Indexes of Retail Sales, Monthly Indexes of Country General Store Sales, Monthly Financing of Motor Vehicle Sales, Monthly Sales of New Motor Vehicles. *Price $1 per year for each publication; the two last-named (together) $1·50 per year.*

(d) Special Reports—A Decade of Retail Trade, 1923-1933 (estimated sales by provinces and by kind-of-business groups carried back to 1923 and extended to 1933); Comparative figures for chain stores. Monthly Indexes of Retail Sales, 1929-1938 (monthly reports on retail trade summarized, corrections applied to allow for differences in number of business days and for seasonal variations). Weekly Earnings of Employees in Merchandising and Service Establishments, 1937—average weekly earnings for male and female employees shown by provinces and for selected kinds of business. Distribution of employees to show percentages of total number receiving various weekly amounts, *Price 25 cents.* The Marketing Structure of the Wholesale Grocery Trade (special analysis of wholesale grocery trade, together with summary figures on grocery retailing), *Price 25 cents.* Motor Vehicle Retailing, 1937, *Price 25 cents.* Regional Indexes of Drug Store Sales, 1936-1938, *Price 15 cents.*

2. PRICES STATISTICS.

Annual Reports—Reports on Wholesale and Retail Prices and Price Indexes in Canada, in the British Empire and in Foreign Countries dealing with commodities, securities (common stocks in Canada and United States, mining stocks, preferred stocks, bond prices and yields, and foreign exchange), prices and index numbers of street car rates, hospital charges, manufactured and fuel gas, electric light rates, telephone rates and wholesale prices of imports and exports, *Price 25 cents.* Preliminary Summary of Price Movements, 1938.

Quarterly Reports—Index Numbers of Wholesale Prices and Cost of Living in Canada, British Empire and Foreign Countries, *Price 25 cents per year.*

INTERNAL TRADE—concluded.

2. Prices Statistics—concluded.

Monthly Reports—Index Numbers of Wholesale Prices and Cost of Living in Canada—Security Prices—Exchange Rates, *Price $1 per year.*

Weekly Reports—Index Numbers of Wholesale Prices including data for general wholesale prices, and industrial material prices, *Price $1 per year.* Security Prices and Foreign Exchange, *Price $1·50 per year, single copies 10 cents.*

Special Reports—Canadian Index Numbers of Industrial Material Prices, 1926-1938, *Price 25 cents.* Index Numbers of Canadian Farm Cost of Living, 1913-1938, and Farm Living Expenditures, 1934, *Price 25 cents.*

The complete series of Prices Reports, Price $2.

3. Balance of International Payments, Capital Movements, and International Investments.

(a) *Annual Reports*—The Canadian Balance of International Payments, 1926-1937. (Current international transactions in goods, gold, and services, and movements of capital), *Price 25 cents.* The Canadian Balance of International Payments, Preliminary Statement, 1938. *Price 15 cents.* British and Foreign Capital Invested in Canada and Canadian Capital Invested Abroad, 1926-1936, *Price 25 cents.* British and Foreign Direct Investments in Canada and Canadian Direct Investments Abroad, 1937, *Price 50 cents.*

(b) *Monthly Reports*—Sales and Purchases of Securities Between Canada and Other Countries, *Price, single copies 10 cents, $1 per year.*

(c) *Special Reports*—The Canadian Balance of International Payments—A Study of Methods and Results (Printed), *Price $1.*

TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES—

(1) *Railways and Tramways.*—Annual Reports: *(a)* Railway Statistics, *Price 50 cents; (b)* Electric Railway Statistics, *Price 25 cents; (c)* Location of Railway Mileages, *Price 10 cents; (d)* Summary of Monthly Railway Traffic Report, *Price 25 cents; (e)* Canadian National Railways, 1923-1938, *Price 20 cents; (f)* Canadian Pacific Railway, 1923-1938, *Price 20 cents.* Monthly Reports: *(a)* Railway Revenues, Expenses, Incomes, and Operating Statistics, *Price 50 cents; (b)* Freight Traffic of Railways, *Price 50 cents.* Weekly Report: Car Loadings of Revenue Freight, *Price $1·50 per year.* Special Report: Index Numbers of Railway Freight Rates, *Price 25 cents. Subscription price for all railway reports, $3 per year.*

(2) *Express.*—Annual Report on Express Statistics, *Price 25 cents.*

(3) *Telegraphs.*—Annual Report on Telegraph Statistics, *Price 25 cents.*

(4) *Telephones.*—Annual Report on Telephone Statistics, *Price 25 cents.*

(5) *Water Transportation.—(a)* Annual Report on Canal Statistics, *Price 25 cents; (b)* Monthly Report on Canal Statistics, *Price 50 cents.*

(6) *Shipping.*—Annual Report of Arrivals and Departures of Vessels for Canadian Ports, *Price 25 cents.*

(7) *Electric Stations.—(a)* Annual Report on Central Electric Stations in Canada, *Price 25 cents; (b)* Report on Index Numbers of Electric Light Rates, *Price 25 cents; (c)* Report on use of Electric Energy in Industries, *Price 25 cents; (d)* Monthly Report on Electric Energy Generated, *Price 50 cents. Subscription price for all central electric station reports, $1 per year.*

(8) *Motor Vehicles.—(a)* Annual Report on Motor Vehicle Registrations, *Price 10 cents; (b)* Highways—Annual Report on Highway Mileage Open for Traffic, Construction, and Expenditures on Construction and Maintenance, *Price 25 cents.*

(9) *Civil Aviation.*—Annual Report, *Price 25 cents.*

Note.—*Subscription price for all Transportation, Communications, and Public Utilities Branch publications, $5 per year.*

FINANCE—

The Public Debt of Canada, Dominion, Provincial and Municipal, 1934, 1936, and 1937 (1935 out of print), *Price 25 cents.*

Provincial Public Finance.

(1) *Financial Statistics of Provincial Governments.—(a)* 1921 to 1936, including special Summaries and Analyses (1923, 1924, and 1927-31 out of print), *Price 25 cents; (b)* Bonded Indebtedness of Provinces. Special analysis, 1916 to 1930. (Out of print.)

FINANCE—concluded.

MUNICIPAL FINANCE.

(1) Statistics of Cities and Towns.—(a) Urban Municipalities Having a Population of 10,000 and Over, 1919 and 1920; *(b)* 1925 to 1936, *Price 25 cents* (1925 and 1928 out of print); *(c)* Urban Municipalities Having Populations of 3,000 to 10,000, 1919; *(d)* Urban Municipalities Having Populations of 1,000 to 3,000, 1920; *(e)* Urban Municipalities Having Populations of 5,000 and Over, and 1,000 to 5,000, 1922.

(2) Assessment Valuations. Analysis by Classes of Municipalities.—(a) 1919 to 1923; *(b)* 1924 to 1936, *Price 25 cents.*

(3) Bonded Indebtedness by Classes of Urban and Rural Municipalitics.—(a) 1919 to 1936, *Price 25 cents.* (1919-23 out of print.)

(4) Municipal Tax Levies and Receipts.—Historical Analysis, 1913-36, *Price 25 cents.*

CIVIL SERVICE STATISTICS OF THE DOMINION GOVERNMENT.

(a) Numbers of Personnel and Salary Expenditure for the Month of January, 1912-1924; (Special Report—out of print); *(b)* Numbers of Personnel and Salary Expenditures by Months, *Price 25 cents*—(1) 1925-31; (2) 1932-34; (3) 1935-36.

JUSTICE—

Criminal Statistics.—Annual Report, *Price 50 cents.* (Covers convictions, sentences, prison statistics, police statistics, pardons, appeals, commutations, and executions.)

EDUCATION—

Survey of Education in Canada.—(Published annually since 1921.) Includes a bibliography of Canadian studies in education (since 1932) and an index of Canadian education periodicals (since 1934). *Price 50 cents.*

Biennial Survey of Libraries in Canada, 1931, 1933, 1935, 1936-38.—(Previous to 1931 library statistics were published at irregular intervals, first for the year 1921.) The Survey now includes public, university, college, government and other technical libraries in each edition. Libraries are listed individually with addresses, names of librarians, and certain other information concerning each library. School libraries were reviewed in the Survey for 1935; hospital and other institutional libraries in the Survey for 1931. *Price 25 cents.*

Report of Dominion-Provincial Conference on School Statistics, 1920, 1936.—A statement of the recommendations for increased comparability and usefulness in school statistics, resulting from discussion among officials of the provincial Departments of Education and the Dominion Bureau of Statistics. *Free.*

SPECIAL EDUCATIONAL BULLETINS.—

(1) Salaries, Qualifications and Experience of Canadian Teachers.—A presentation of statistics for six provinces according to the plan recommended by the Dominion-Provincial Conference of 1936. *Price 15 cents.*

(2) Supply and Demand in the Professions in Canada.—The census record of professional occupations is consulted, along with university statistics of recent years, to see to which occupations the universities are graduating more (or fewer) workers than required. A list of schools and faculties training for each profession is appended. *Price 25 cents.*

(3) The Use of Films and Slides in Canadian Schools.—A summary of the information collected concerning more than 90 p.c. of Canadian schools. Includes a list of about 70 motion picture sources in Canada, and 300 addresses of persons especially interested in school motion pictures. *Price 25 cents.*

(4) The Use of Radios and Phonographs in Canadian Schools. A companion bulletin to Number 3. *Price 25 cents.*

(5) The Extent of Language Study in High Schools.—A comparison of the Canadian provinces with the States of the United States. *Price 15 cents.*

(6) Directory of Private Schools in Eight Provinces.—Includes the addresses of independent elementary, secondary and commercial schools in all provinces except Quebec (for which a similar list is published by the province). Indicates for each school its control, and whether its pupils are elementary or secondary, boys or girls. A page is included to indicate what other school directories are available in Canada. *Price 25 cents.*

(7) List of Public Secondary Schools in Canada.—Lists the larger secondary schools of each province alphabetically according to post office address—about 1,150 academic, 80 technical, and 100 commercial high schools. Agricultural schools and schools of fine art are also included. *Price 50 cents.*

EDUCATION—concluded.

Special Educational Bulletins—concluded.

(8) Assistance to Schools from Museums and Art Galleries.—Describes the practice in Canada. *Price 15 cents.*

(9) Teachers' Salaries in Eight Provinces, 1938.—Shows the salary distribution separately for rural, village, town and city schools of each province, and for the larger cities individually. *Price 15 cents.*

(10) The Size Factor in One-Room Schools.—Compares differences in pupil progress, teachers and costs in small and large schools. *Price 15 cents.*

(11) Museums in Canada.—A first report on Canadian museums, including art galleries. Includes a classified directory. *Price 25 cents.*

Note.—*Subscription price for all Education Branch publications, $1 per year.*

INSTITUTIONS—

(1) Annual Report on Mental Institutions, 1936, *Price 25 cents.* (2) Directory of Hospitals, 1935, *Price 50 cents.* (3) Annual Report on Hospitals for the Sick, 1936, *Price 25 cents.* (4) Report on Penitentiaries and Reformatories, 1936, *Price 25 cents.* (5) Report on Charitable Institutions, 1936, *Price 25 cents.* (6) Report on Tuberculosis Institutions, 1936, *Price 25 cents.*

GENERAL—

Regular Reports—

(1) National Wealth and Income.—Estimates of the National Wealth of Canada, by Provinces, Industries, etc., *Price 25 cents;* Incomes Assessed for Income War Tax, *Price 25 cents.*

(2) Employment.—Monthly and Annual Reports on Employment (with Index Numbers of Employment by Economic Areas, Cities and Industries), *Price $1 per year.*

(3) Commercial Failures.—Monthly and Annual Reports, *Price 50 cents per year.*

(4) Bank Debits.—Monthly and Annual Reports of Bank Debits to Individual Accounts at the Clearing-House Centres of Canada, Bank Clearings, and the Equation of Exchange, *Price 50 cents per year.*

(5) Business Statistics.—The Monthly Review of Business Statistics, *Price $1 per year*—A statistical summary with charts and text, of current economic conditions in Canada. Special Supplements, *Price 25 cents each*—Twelve Years of the Economic Statistics of Canada, 1919-30; Monthly Indexes of the Physical Volume of Business in Canada, 1919-32; Original Monthly Statistics of Chief Economic Importance, 1919-33. Recent Economic Tendencies in Canada 1919-1934. Economic Fluctuations in Canada During the Post-War Period. Business Conditions in Canada in Elapsed Months of Current Year (monthly), *Price $1 per year.*

(6) Divorce.—Annual Report, *Price 10 cents.*

(7) Liquor Control.—Annual Report on the Control and Sale of Liquor, *Price 25 cents.*

(8) Tourist Trade.—Annual Report, *Price 25 cents.*

(9) The Canada Year Book.—The official statistical annual of the physiography, resources, history, institutions, and social and economic conditions of the Dominion, with a statistical summary of the progress of Canada, maps, diagrams, etc., *Price $1·50.*

Contents: I. Physical Characteristics of Canada (geographical features; geological formation; seismology; flora; fauna; natural resources; climate and meteorology). II. History and Chronology. III. Constitution and Government (constitution and general government of Canada; provincial and local government in Canada; parliamentary representation in Canada). IV. Population (growth and distribution). V. Vital Statistics. VI. Immigration. VII. Survey of Production. VIII. Agriculture. IX. Forestry. X. Fur Resources and Fur Production. XI. Fisheries. XII. Mines and Minerals. XIII. Water Powers. XIV. Manufactures. XV. Construction. XVI. External Trade. XVII. Internal Trade. XVIII. Transportation and Communications (government control over transportation and communications; steam railways; electric railways; express companies; road transportation; waterways; air navigation; wire communications; wireless communications; the post office; the press). XIX. Labour and Wages. XX. Prices. XXI. Public Finance (Dominion public finance; provincial public finance; municipal public finance; national wealth and income). XXII. Currency and Banking; Miscellaneous Commercial Finance. XXIII. Insurance (and Government annuities). XXIV. Commercial Failures. XXV. Education. XXVI. Public Health and Related Institutions. XXVII. Judicial and Penitentiary Statistics. XXVIII. Miscellaneous Administration (public lands; national defence; public works; etc.).

GENERAL—concluded.

Regular Reports—concluded.

(9) The Canada Year Book: Contents—concluded.

XXIX. Sources of Official Statistical and Other Information Relative to Canada. XXX. The Annual Register (Dominion legislation; principal events of the year; extracts from the *Canada Gazette re* official appointments, commissions, etc.). Appendix.

[Issues of the Canada Year Book for 1920 (English only), 1921, 1924, 1925, 1926 (English only), 1929, 1930 and 1931, are available.]

(10) Canada.—The Official Handbook of Present Conditions and Recent Progress (published annually), *Price 25 cents.*

(11) The Daily News Bulletin.—A mimeographed report summarizing the chief items of statistical importance in news-letter form, and listing the reports issued each day by the Bureau of Statistics, *Price $1·50 per year.*

(12) The Weekly News Bulletin.—A mimeographed report summarizing the chief items of statistical importance in news-letter form, and listing the reports issued each week by the Bureau of Statistics, *Price $1 per year.*

(13) A Fact a Day about Canada.—A monthly compilation of daily facts, particularly useful in school work, *Price 25 cents a year.*

Special Reports—

(1) The Prairie Provinces in Their Relation to the National Economy of Canada.—A statistical study of their social and economic condition in the twentieth century, *Price 50 cents.*

(2) Index Numbers of Farm Living Costs, 1913-1938, and Farm Living Expenditures, 1934, Price 25 cents.

(3) Comparison of Wage-Earner Family Expenditures in Twelve Cities, Price 10 cents. (Also separate releases for each of the twelve cities, *Price 10 cents each.*)

(4) Expenditures for Health Maintenance, Price 10 cents.

(5) Wage-Earner Family Living Expenditure and Income, Price 25 cents.

(6) Wage-Earner Family Composition in Relation to Expenditure, Price 25 cents.

(7) Wage-Earner Family Food Purchases for One Week (between October 3 and November 10, 1938), Price 25 cents.

(8) Housing Accommodation and Living Expenditures of Owner and Tenant Wage-Earner Families, Price 25 cents.

Note.—*The complete service of all publications issued by the Bureau of Statistics (with the exception of news bulletins) may be obtained for a special rate of $25 per year.*

Section 2.—Acts Administered by Dominion Departments.

List of the Principal Acts of Parliament Administered by Departments of the Government of the Dominion of Canada, as Compiled from Information Supplied by the respective Departments.

(Numbers within parentheses, unless otherwise indicated, denote chapters of the Revised Statutes of Canada, 1927—R.S.C., 1927.)

Note.—*Copies of individual Acts of Parliament may be obtained from the King's Printer at prices of from 10 cents to $1 per copy according to number of pages.*

Agriculture.—Department of Agriculture (4); Experimental Farm Stations (61); Dairy Industry (45); Cold Storage (25); Seeds (185); Feeding Stuffs (67); Live Stock Pedigree (121); Live Stock and Live Stock Products (120); Animal Contagious Diseases (6); Meat and Canned Foods (77); Destructive Insect and Pest (47); Fertilizers (69); Section 235, Criminal Code (Race Track Betting) (36); Inspection and Sale (100); Maple Sugar Industry (1930, c. 30); Agricultural Pests Control (5); Hay and Straw Inspection (1932-33, c. 26); Prairie Farm Rehabilitation (1935, c. 23); Fruit, Vegetables, and Honey (1935, c. 62).

Auditor General.—Consolidated Revenue and Audit (1931, c. 27).

Civil Service Commission.—Civil Service (22), as amended (1932, c. 40; 1938, c. 7).

External Affairs.—The functions and duties of this Department are defined by the Department of External Affairs Act (65).

Finance.—Appropriation; Bank (1934, c. 24); Bank of Canada (1934, c. 43; 1936, c. 22; 1938, c. 42); Bills of Exchange (16) and (1934, c. 17); Board of Audit (10); Canadian Farm Loan (66) and (1934, c. 46; 1935, c. 16); Canadian Fisherman's Loan (1935, c. 52); Canadian National Railways Refunding (1938, c. 22); Canadian National Railways Financing and Guarantee (1938, c. 43); Civil Service Superannuation (24); Consolidated Revenue and Audit (1931, c. 27); Currency (40); Dept. of Finance and Treasury Board (71) and (1931, c. 48); Exchange Fund (1935, c. 60); Farmers' Creditors Arrangement (1934, c. 53; 1935, cc. 20 and 61; 1938, c. 47); Federal District Commission (1927, c. 55; 1928, c. 26); Home Improvement Loans Guarantee (1937, c. 11); Interest (102); Municipal Improvements Assistance (1938, c. 33); National Housing (1938, c. 49); Old Age Pensions (156) and (1931, c. 42; 1937, c. 13); Penny Bank (13) and (1932-33, c. 51); Provincial Subsidies (192); Quebec Savings Banks (14) and (1934, c. 39); Saskatchewan Seed Grain Loans Guarantee (1936, c. 9); Seed Grain Loans Guarantee, (1937, c. 39; 1938, c. 13). Special War Revenue (in part) (179) and (1928, c. 50; 1934, c.42); Gold Export (1932, c. 33; 1935, c. 21); Tariff Board (1931, c. 55); Winding-Up (213). Not regularly administered by the Department but under the jurisdiction of the Minister of Finance: Escheats (58); Money Lenders (135); Pawnbrokers (152); Satisfied Securities (184).

Fisheries.—Fisheries (1932, c. 42; 1934, c. 6; 1935, c. 5); Fish Inspection (72); Meat and Canned Foods (77) and (1934, c. 38; 1935, c. 31, so far as it relates to fish and shellfish); Deep-Sea Fisheries (74); Northern Pacific Halibut Fishery (Convention) (1937, c. 36); Pelagic Sealing (1938, c. 39); Customs and Fisheries Protection (43) so far as it relates to fisheries; Navigable Waters Protection (140, in part); Act respecting Sockeye Salmon Fisheries Convention (1930, c. 10). The Fisheries Research Board Act (1937, c. 31) is also administered by the Minister of Fisheries.

Insurance.—Department of Insurance (1932, c. 45); Canadian and British Insurance Companies (1932, c. 46; 1932-33, c. 32; 1934, cc. 27, 45; 1936, c. 18; 1937, c. 5; 1938, c. 21; 1939, c. 10); Foreign Insurance Companies (1932, c. 47; 1934, c. 36; 1939, c. 18); Loan Companies (28) and (1934, c. 56); Trust Companies (29) and (1931, c. 57); Civil Service Insurance (23).

Justice.—Department of Justice (106); Solicitor-General's (107); Northwest Territories (142); Yukon (215); Royal Canadian Mounted Police (160); Judges (105); Supreme Court (35); Exchequer Court (34); Admiralty (33); Petition of Right (158); Criminal Code (36); Penitentiary (154); Prisons and Reformatories (163); Identification of Criminals (38); Ticket of Leave (197); Fugitive Offenders (81); Extradition (37); Juvenile Delinquents (108). The following Acts, while not regularly administered by the Department, are under the jurisdiction of the Minister of Justice: Canada Evidence (59); Marriage and Divorce (127); Tobacco Restraint (199); Debts Due the Crown (1927, c. 51; 1932, c. 18); Juvenile Delinquents (1929, c. 46); Administration of Justice in the Yukon (1920, c. 62); Divorce (Ontario, 1930, c. 14); Divorce Jurisdiction (1930, c. 15).

King's Printer and Controller of Stationery.—Public Printing and Stationery (162); The Publication of Statutes (2).

Labour.—Labour Department (111); Conciliation and Labour (110); Industrial Disputes Investigation (112); Fair Wages Resolution of the House of Commons, 1900; Fair Wages and Hours of Labour (1935, c. 39); Employment Offices Co-ordination (57); Technical Education (193) as amended (1929, c. 8; 1934, c. 9; 1939, c. 8); Vocational Education (1931, c. 59); Government Annuities (7) and (1931, c. 33); Combines Investigation (26) as amended (1935, c. 54; 1937, c. 23); White Phosphorous Matches (128); Unemployment Relief (1930, c. 1); Unemployment and Farm Relief (1931, c. 58); Unemployment and Farm Relief Continuance (1932, c. 13); Relief (1932, c. 36); Relief (1932-33, c. 18); Relief (1934, c. 15); Relief (1935, c. 13); Unemployment Relief and Assistance (1936, c. 15) as amended (1936, c. 46); Unemployment and Agricultural Assistance (1937, c. 44); Unemployment and Agricultural Assistance (1938, c. 25); Unemployment and Agricultural Assistance (1939, c. 26); Youth Training (1939, c. 35).

Mines and Resources.—Lake of the Woods Control Board (1921, c. 10); Explosives (62); Forest Reserves and Parks (78); Geology and Mines (83); Seed Grain (87); Seed Grain Sureties (88); The Immigration Act (93); The Chinese Immigration Act (95); Indian Act (98); Irrigation (104); Dominion Lands (113); Public Lands Grants (114); Ordnance and Admiralty Lands (115); Railway Belt (116); Dominion Lands Survey (117); Lands Titles (118); Manitoba Supplementary Provisions (124); Migratory Birds Convention (130); Northwest Game (141); Northwest Territories (142); Reclamation (175); Saskatchewan and Alberta Roads (180); Soldier Settlement (188); Dominion Water Power (210); Railway Belt Water (211); Yukon (215); Yukon Placer Mining (216); Yukon Quartz Mining (217); St. Regis Islands (1927, c. 37); An Act respecting certain Debts due the Crown (1927, c. 51); Domestic Fuel (1927, c. 52); Lac Seul Conservation (1928, c. 32); An Act respecting Water Power in Alberta, Saskatchewan, and Manitoba, (1929, c. 61); Alberta Natural Resources (1930, c. 3); Manitoba Natural Resources (1930, c. 29); National Parks (1930, c. 33); Railway Belt and Peace River Block (1930, c. 37); Saskatchewan Natural Resources (1930, c. 41); Refunds (Natural Resources) (1932, c. 35).

National Defence.—Department of National Defence (136); Naval Service (139); Naval Discipline; Militia (132); Militia Pension (133); Royal Military College (1928, c. 7); Ss. 85 and 86 Criminal Code; Army; Regimental Debts; Aeronautics (3); Air Force; Visiting Forces (British Commonwealth), 1933 (1932-33, c. 21).

National Revenue.—Customs Tariff (44); Customs (42); Canada Shipping (in part) (186); Animal Contagious Diseases (in part) (6); Destructive Insect and Pest (in part) (47); Export (63); Copyright (in part) (32); Petroleum and Naphtha (159); Excise (60); Special War Revenue, 1915 (179); Income War Tax, 1917 (97); Agricultural Pests Control (in part) (5); Customs and Fisheries Protection (in part) (43); Explosives (in part) (62); Fertilizers (in part) (69); Food and Drugs (in part) (76); Fruit, Vegetables, and Honey, (in part) (1935, c. 62); Inspection and Sale (in part) (100); Meat and Canned Foods (in part) (77); Opium and Narcotic Drug (in part) (144); Precious Metals Marking (in part) (84); Patent and Proprietary Medicine (in part) (151); Quarantine (in part) (168); Seeds (in part) (185); Weights and Measures (in part) (212).

Pensions and National Health.—*Pensions:* Department of Pensions and National Health (Part I) (1928, c. 39); War Veterans' Allowance (1930, c. 48, and amendments); Veteran's Assistance Commission (1936, c. 47); Pension (157 and amendments); Returned Soldiers' Insurance (1920, c. 54, and amendments). The two latter Acts are adjudicated upon by the Canadian Pension Commission. *National Health:* Department of Pensions and National Health (Part II) (1928, c. 39); Quarantine (168); Public Works Health (91); Leprosy (119); Canada Shipping (Sick Mariners and Marine Hospitals) (1934, c. 44); Proprietary or Patent Medicine (151); Opium and Narcotic Drug (1929, c. 49, and amendments); Food and Drugs (including Honey) (76 and amendments).

Post Office.—Post Office (161); Special War Revenue (in part) (179).

Public Archives.—Public Archives (8).

Public Works.—Expropriation (64); Ferries (68); Government Harbours, Piers and Breakwaters (Section 5) (89); Navigable Waters Protection (Part I) (140); Public Works (166); Government Works Toll (167); Railway (Section 248) (170); Dry Dock Subsidies (191); Telegraphs (194); National Art Gallery (1913, c. 33); Act Regulating Vehicular Traffic on Dominion Property (1930, c. 47).

Secretary of State.—Companies (1934, c. 33) as amended; Naturalization (138); Patents (1935, c. 32); Copyright (32) as amended; Unfair Competition (1932, c. 38); Canada Temperance (196); Boards of Trade (19) as amended; Ticket of Leave (197) as amended; Trade Unions (202); Companies' Creditors Arrangement (1932-33, c. 36); Canadian Nationals (21); Department of State (189); Translation Bureau (1934, c. 25); Treaties of Peace; Timber Marking (198) and (1930, c. 45); Trade Mark and Design (201) and (1928, c. 10).

Trade and Commerce.—Canada Grain (1930, c. 5; 1932-33, cc. 9, 24; 1934, c. 26); Electricity and Fluid Exportation (54); Electricity Inspection (55); Electric Units (56); Gas Inspection (82); Inland Water Freight Rates (208); Precious Metals Marking (84) and (1928 c. 40; 1929, c. 53); Statistics (190); Weights and Measures Inspection (212); Act to place Canadian Coal used in the Manufacture of Iron or Steel on a Basis of Equality with Imported Coal (1930, c. 6); Water Meters (209); Research Council (177); Canadian Wheat Board (1935, c. 53); Dominion Trade and Industry Commission (1935, c. 59); National Film (1939).

Transport.—Canada Shipping (1934, c. 44); Government Harbours and Piers (89); Live Stock Shipping (122); Maritime Conventions (126); Navigable Waters Protection (Part 2) (140); Government Vessels Discipline (203); The Water-Carriage of Goods, 1936 (1936, c. 49); United States Wreckers (214); Belleville Harbour Commission (1889, c. 35); Hamilton Harbour Commission (1912, c. 98); North Fraser Harbour Commission (1913, c. 162); New Westminster Harbour Commission (1913, c. 158); Trenton, Ontario, Harbour Commission (1922, c. 50); Toronto Harbour Commission (1911, c. 26); Winnipeg and St. Boniface Harbour Commission (1912, c. 55); National Harbours Board (1936, c. 42); Canadian Broadcasting (1936, c. 24); Department of Transport (171) as amended (1936 c. 34); Government Railways (173); Intercolonial and Prince Edward Island Railways Employees' Provident Fund (1907, c. 22); National Transcontinental Railway (1903, c. 71); Canadian National Railways (172); Government Employees' Compensation (30); Canadian National Steamships (1927, c. 29); Maritime Freight Rates (79); Canadian National-Canadian Pacific (1933, c. 33) as amended (1936, c. 25); Railway (170); Trans-Canada Air Lines (1937, c. 43); Aeronautics (3); Transport, 1938 (1938, c. 53); Radio, 1938 (1938, c. 50); Carriage by Air, 1939.

An Act Respecting the Beauharnois Light, Heat and Power Co. (1931, c. 19); An Act to declare certain works of the Beauharnois Light, Heat and Power Company to be for the general advantage of Canada (1931, c. 20).

Section 3.—Publications of Dominion Departments.

List of Principal Publications of the Departments of the Government of the Dominion of Canada as Compiled from Information Supplied by the respective Departments.

NOTE.—*A catalogue of the official publications of the Parliament and Government of Canada, stating prices, is issued regularly once a year, with supplements when required; copies may be obtained from the King's Printer, Ottawa.*

Agriculture.—Annual Reports of the Minister, the Veterinary Director General, and progress reports of the Dominion Agrostologist, 1934-36, Dominion Animal Husbandman, 1930-36, Dominion Apiarist, 1934-36, Dominion Bacteriologist, 1934-36, Dominion Botanist, 1935-37, Dominion Cerealist, 1934-37, Dominion Chemist, 1934-36, Dominion Field Husbandman, 1931-35, Dominion Horticulturist 1931-33, Dominion Poultry Husbandman, 1934-36, Economic Fibre Production, 1934-36, Illustration Stations, 1934-37. Divisions of the Experimental Farms Branch. Progress Reports covering the work conducted on the Experimental Farms and Stations located at Agassiz, B.C., 1931-35, Brandon, Man., 1931-36, Beaverlodge, Alta., 1931-36, Cap Rouge, Que., 1933-36, Charlottetown, P.E.I., 1932-36, Farnham, Que., 1931-35, Fredericton, N.B., 1931-36, Harrow and Delhi, Ont., 1932-36, Indian Head and Sutherland, Sask, 1932-36, Indian Head, Sask., 1931-36, Kapuskasing, Ont., 1931-36, Kentville, N.S., 1931-36, Lacombe, Alta., 1932-36, L'Assomption, Que., 1930-36, Lennoxville, Que., 1931-36, Lethbridge, Alta., 1931-36, Manyberries, Alta., 1927-36, Morden, Man., 1931-37, Nappan, N.S., 1932-36, Regina, Sask., 1931-36, Rosthern, Sask., 1931-36, Saanichton, B.C., 1932-36, Scott, Sask., 1931-36, Ste. Anne de la Pocatière, Que., 1931-36, Summerland, B.C., 1932-36, Summerside Fox Ranch, P.E.I., 1931-34, Swift Current, Sask., 1931-36, Windermere, B.C., 1931-36. Bulletins and circulars of the Experimental Farms Branch on a great variety of agricultural subjects, including publications of the following Divisions: Field Husbandry; Animal Husbandry; Horticulture; Cereal; Chemistry; Forage Plants; Botanical; Poultry; Tobacco; Economic Fibre; Bacteriology; Bees; and Illustration Stations. Bulletins of the Dairy and Cold Storage Branch relating to the dairying and cold storage industries in Canada, the making of butter and cheese, dairying experiments, co-operation, etc. Reports, bulletins, circulars, etc., of the Live Stock Branch on cattle, sheep, swine, and poultry, marketing of eggs, wool, etc. Bulletins of the Health of Animals Branch, with regulations as to: contagious abortion; rabies; sheep scab; actinomycosis; anthrax; glanders; hog cholera; tuberculosis; foot and mouth disease; quarantine; and meat inspection. Bulletins and reports of the Seed Branch as to seed-testing, the production and use of seed grains, the Seed Control Act, the Feeding Stuffs Act, and the Fertilizers Act. Bulletins and circulars of the Entomological Branch and instructions to importers of nursery stock. Fruit Branch reports relating to the marketing of fruits and vegetables and their preservation, the Fruit and Honey Act, and the Maple Sugar Industry Act.

A pamphlet entitled "Departmental Directory and List of Publications" contains a list of the publications of the Department, numbering more than 300. These publications include, in addition to the reports, bulletins, and circulars on field crops, live stock, dairying, orchard and garden, animal, insect, and plant diseases, bee-keeping, poultry, and miscellaneous topics. With few exceptions, the publications of the Department are free on application to its Publicity and Extension Branch.

Auditor General.—Annual Report.

Board of Transport Commissioners for Canada.—Annual Report. Pamphlet containing Judgments, Orders, Regulations, and Rulings, issued fortnightly.

Civil Service Commission.—Annual Report. Regulations of the Civil Service Commission. The Classification of the Civil Service of Canada. How Appointments are made in the Public Service. Examinations for Clerks, Stenographers, and Typists. Examinations for Customs Service. Examinations for Postal Service. Examinations for Junior Trade Commissioners. Examinations for Immigration Service. Positions exempted from the Civil Service Act.

External Affairs.—Annual Report. Annual Treaty Series. British and Foreign Government Representatives in Canada. Report of the Canadian Delegates to the Assembly of the League of Nations.

Finance.—Annual Report on the Public Accounts of the Dominion of Canada. Monthly Statements of the Chartered Banks of Canada. Estimates. Reprint of the Budget Speech of the Minister of Finance. Report on the Administration of Old Age Pensions in Canada. Report on the Operation of the Municipal Improvements Assistance Act, 1938.

Fisheries.—*(Publications marked * are available in both English and French editions.)* *Annual Report, including Fish Culture Report. Annual Statistical Report (contains both English and French sections). Fish Culture Report. Popular Account of a Number of Canadian Fishes—A. Halkett. *Canada's Fisheries. Map of the Atlantic Coast Provinces showing the Inshore and Deep-Sea Fishing Grounds. Statistics of the Haddock Fishery in

North American Waters—A. W. H. Needler. Statistics of the Catch of Cod off the East Coast of North America, 1926—O. E. Sette. Statistics of the Mackerel Fishery off the East Coast of North America, 1804 to 1930—O. E. Sette and A. W. H. Needler. Discoloration, Smut or Blackening of Canned Lobsters—Harrison and Hood. Historical Account of the Lobster-Canning Industry—R. H. Williams. *Fish Canning in Canada (non-technical). *Fisheries News Bulletin (monthly). *The Salmon Fishery of British Columbia. Report on Fisheries Investigations in Hudson Bay, 1930. *Summary of the Report by Messrs. Cockfield, Brown and Company, Limited, on the Marketing of Canadian Fish and Fish Products. *Oyster Farming on the Atlantic Coast of Canada. *Hardening Mud Bottoms for Oyster Culture (mimeographed). Factors in the Shipment of Live Lobsters from Eastern Nova Scotia. Investigations into the Natural History of the Herring—Hjort. *The Life of the Atlantic Salmon. *Proceedings No. 1 of the North American Council on Fishery Investigations, 1921-30, and *Proceedings No. 2, 1931-33. *Report of the Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands, 1927. *The Storage of Oysters—A. W. H. Needler. Check List of the Fishes of the Dominion of Canada and Newfoundland, illustrated (*$2*)—A. Halkett. *100 Tempting Fish Recipes (fish cooking hints and recipes). *Memoranda (mimeographed) dealing with some methods of fish processing. *Memorandum descriptive of some fish hatchery methods. Report on Markets for Dried and Pickled Fish—O. F. MacKenzie and F. Homer Zwicker.

NOTE.—*Publications of the Department of Fisheries are distributed at the discretion of the Department and applicants for any papers should indicate the purposes for which they are desired. In some cases charges may be made.*

Insurance.—Quarterly Statement showing List of Registered Insurance Companies. Annual Abstract of Statements of Registered Insurance Companies (subject to correction). Annual Reports of the Insurance Department, Vol. I (Fire and Miscellaneous), Vol. II (Life Companies and Fraternal Benefit Societies). Annual List of Securities held by Insurance, Trust and Loan Companies, with Department's Valuation thereof. Annual Abstract of Statements of Loan, Small Loan and Trust Companies (subject to correction). Annual Report of Loan, Small Loan and Trust Companies. Classification of Fire Insurance Risks. Table of Bond Values. Statistical Report of Fire Losses in Canada.

Justice.—Annual Report of the Superintendent of Penitentiaries. Canadian Constitutional Decisions of the Judicial Committee, *Price $5.*

King's Printer and Controller of Stationery.—The Canada Gazette, (published weekly, with occasional supplement and extras), *subscription, in Canada and United States, $8 per annum payable in advance, single copies 20 cents each; other countries $10 per annum and 25 cents per single copy.* Judgments of the Board of Transport Commissioners, semi-monthly, *$3 per annum, single copies, 20 cents.* Canada Law Reports, published monthly, *yearly subscription, $6.* Revised Statutes of Canada, 1927 (5 vols.), *$10.* Annual Statutes, 1928-38, *$5 each.* Acts, Public and Private, with Amendments to date, *10 cents to $1 per copy.* Canadian Postal Guide, *$1, including supplements additional 25 cents.* Parliamentary Debates, "Hansard", issued daily during session (French and English), *$3 per session each for House of Commons and Senate Debates; single copies, 5 cents.*

NOTE.—*Prices of bluebooks are in nearly every case printed upon the front cover and are based practically on cost. They may be ordered direct from the King's Printer, Ottawa. A catalogue of official publications of the Parliament and Government of Canada is issued regularly once a year with supplements when required and copies may be obtained from the King's Printer, Ottawa.*

Labour.—*Monthly.*—The Labour Gazette (published in English and French) *at a subscription price of 20 cents per annum, postage prepaid, to subscribers in Canada, the United States of America, and Mexico, and of $1 per annum, postage prepaid, to subscribers in all other countries.* *Annual.*—Report of the Department of Labour (separate reprints are issued of the chapters dealing with the administration of the following statutes: Industrial Disputes Investigation Act; Government Annuities Act; Employment Offices Co-ordination Act; Technical Education Act; Combines Investigation Act; Unemployment and Agricultural Assistance Act). Report on Wages and Hours of Labour in Canada. Report on Prices in Canada and Other Countries. Report on Strikes and Lockouts in Canada and Other Countries. Report on Labour Organization in Canada. Report on Labour Legislation in Canada (from time to time there are issued consolidated reports, the most recent of which reproduces the text or a summary of all Dominion and provincial labour legislation in existence at Dec. 31, 1937). *General Reports.*—Report on Industry, Commerce, and the Professions in Canada (the most recent issue is for the year 1937). Report of Judicial Proceedings Respecting Constitutional Validity of the Industrial Disputes Investigation Act, 1907, and Amendments of 1910, 1918, and 1920. The Employment of Children and Young Persons in Canada. Trade Union Law in Canada. Final Report of the National Employment Commission. Training Canada's Young Unemployed. *Reports of Investigations under the Combines Investigation Act.*—(1) Report of Commissioner on Alleged Combine in the Distribution of Fruit and Vegetables in Western Canada, 1925; (2) Report of Registrar on Alleged Combine Limiting Competition in the Marketing of New Brunswick Potatoes, 1925; (3) Report of Registrar on Alleged Combine in the Manufacture and Sale of Bread in the City of Montreal, 1926; (4) Report of Commissioner on Alleged Combine in the Distribution of Fruits and Vegetables Produced in Ontario, 1926; (5) Interim Report of Registrar on the Proprietary Articles Trade Association, an Alleged Combine of Wholesale and Retail Druggists and Manufacturers, Established to Fix and Maintain Resale Prices of Proprietary Medicines and Toilet Articles, 1926; (6)

Report of Commissioner on the Proprietary Articles Trade Association, 1927; (7) Report of Commissioner on the Amalgamated Builders' Council and Related Organizations, an Alleged Combine of Plumbing and Heating Contractors and Others in Ontario, 1929; (8) Report of Commissioner on the Electrical Estimators' Association, an Alleged Combine of Electrical Contractors in the City of Toronto, 1930; (9) Report of Registrar on Alleged Combine in the Bread-baking Industry in Canada, 1931; (10) Report of Commissioner on Alleged Combine in the Motion Picture Industry in Canada, 1931; (11) Report of Registrar on Alleged Combine of Tobacco Manufacturers and Other Buyers of Raw Leaf Tobacco in Ontario, 1933; (12) Report of Registrar on Alleged Combine in the Importation and Distribution of British Anthracite Coal in Canada, 1933; (13) Report of Commissioner under the Inquiries Act on Anthracite Coal, 1937; (14) Report of Commissioner on Alleged Combine in the Distribution of Tobacco Products in Alberta and Elsewhere in Canada, 1938; (15) Report of Commissioner on Alleged Combine in the Manufacture and Sale of Paperboard Shipping Containers and Related Products, 1939. *Bulletins in Industrial Relations Series.*—(1) Joint Councils in Industry; (2) Report of a Conference on Industrial Relations Held at Ottawa in 1921; (3) Report of Joint Conference of the Building and Construction Industries in Canada, 1921; (5) Canada and the International Labour Conference; (7) Canadian Railway Board of Adjustment No. 1, Second Report; (8) Report of National Conference Regarding Winter Employment in Canada, 1924; (9) Canadian Railway Board of Adjustment No. 1, Third Report; (10) Canadian Railway Board of Adjustment No. 1, Fourth Report; (11) Government Intervention in Labour Disputes in Canada; (12) Canadian Railway Board of Adjustment No. 1, Fifth Report; (13) Railway Board of Adjustment No. 1, Sixth Report.

Mines and Resources.—

Note.—*The Department of Mines and Resources has published a large number of reports and maps dealing with the natural resources of Canada and applications for publications, other than the Annual Report of the Department, should be addressed to the Directors of the Branches concerned. Hereunder is listed the more important publications of the year 1938. Catalogues listing the complete series of reports will also be furnished upon request.*

Departmental.—Annual Report of the Department of Mines and Resources for fiscal years.

Mines and Geology Branch.—Annual Report Separate Mines and Geology Branch. *Bureau of Geology and Topography.*—Memoir 215: Fossil Flora of Sydney Coal Field, by W. A. Bell; Memoir 210: Rice Lake Gold Lake Area, Southeastern Manitoba, by C. H. Stockwell; Memoir 217: Laberge Map-area, Yukon, by H. S. Bostock and E. J. Lees; Memoir 218: Mining Industry of Yukon, 1937, by H. S. Bostock. *National Museum of Canada.*—Bulletin 90: The Sarcee Indians of Alberta, by D. Jenness; Bulletin 91: Annual Report of the National Museum for the Fiscal Year 1937-38. *Bureau of Mines.*—Limestones of Canada, P. IV, Ont., by M. F. Goudge; Comparative Pulverized Fuel, by C. E. Baltzer and E. S. Malloch; Canadian Mineral Industry, 1937; Improving Properties of Clays and Shales. *Explosives Division.*—The Storage of Explosives; Report for the Calendar Year 1937.

Lands, Parks and Forests Branch.—Annual Report Separate Lands, Parks and Forests Branch. *Bureau of Northwest Territories and Yukon Affairs.*—Game Ordinance and Fur Export Tax Ordinance; Canada's Reindeer Experiment. *National Parks Bureau.*—Jasper National Park—General Information Folder; Riding Mountain National Park; Guide to Fort Chambly; Kootenay, Yoho, Glacier, Mt. Revelstoke—General Information Folder; Banff National Park—General Information Folder; National Parks of Canada; Historic Sites of Canada (French); Catalogue of Motion Picture Films; Waterton Lakes National Park. *Forest Service.*—(No. 2) White Spruce; (No. 53) Brown Stain in Sugar Maple; (No. 91) Forests of New Brunswick; (No. 92) Economic Aspects of the Forests and Forest Industries of Canada; (No. 54) The Strength of Eastern Canadian Spruce Timbers in Sizes Shipped to the United Kingdom; (No. 56) The Preservative Treatment of Fence-Posts; (No. 95) The Penetration into Wood of Cooking Liquors and other Media; Forestry Lessons; Canada's Forests.

Surveys and Engineering Branch.—Annual Report Separate Surveys and Engineering Branch. *Dominion Observatories.*—Saturday Evening Program—July, August, September; Vol. XII, No. 18—Bibliography of Seismology, *Price 25 cents*; Vol. VII, No. 6—The Calculation of Rotating Factors for Eclipsing Binaries, *Price 40 cents*; Vol. XII, No. 19—Bibliography of Seismology, *Price 25 cents*; Vol. VII, No. 3—The Definitive Orbit of the Spectrographic Binary Beta Arietis, *Price 25 cents*; Vol. VII, No. 4—The Spectroscopic Orbit of H. D. 195986, *Price 60 cents*; Vol. VII, No. 5—One Hundred and Thirty-two New Variable Stars in Five Globular Clusters, *Price 50 cents*; Saturday Evening Program—October, November, December; Vol. XI, No. 4—Gravity Determinations in 1936, *Price 25 cents*; Vol. VII, No. 7—The Spectrographic Orbit of Boss 3511; Saturday Evening Program—January, February, March; Vol. XII, No. 20—Bibliography of Seismology, *Price 25 cents*; Saturday Evening Program—April, May, June. *Hydrographic and Map Service.*—Tide Tables for: Atlantic Coast, *Price 25 cents*; Prince Rupert; Halifax and Sydney; Saint John; Quebec and Father Point; Charlottetown; Vancouver and Sand Heads, *Price 10 cents each*; Pacific Coast, *Price 25 cents*; British Columbia Pilot, *Price $1*; Catalogue of Maps and Publications; Supplement No. 2—(St. Lawrence River Pilot). *Water and Power Bureau.*—Water Resources Paper No. 78—Pacific Drainage, 1932-33 and 1933-34. *Geodetic Service.*—No. 59—The Transfer of Geodetic Data from One Ellipsoid to Another, *Price $1.50*; Reports of International Association No. 75.

National Defence.—Annual Report; List of Officers, Defence Forces of Canada, Naval, Military, and Air Services; Canadian Navy List; Naval General Orders; General Orders, Militia; Militia Orders; Air Regulations; Air Force General Orders.

National Research Council.—A list of 773 publications issued by the National Research Council, 1918-38, is available for free distribution on request. This list includes Annual Reports of the Council; Technical Reports Nos. 1-18; Bulletins Nos. 1-19; Mimeographed Reports not hitherto listed as Council publications; Papers reprinted from the Canadian Journal of Research which contain (i) Reports of experimental work carried on in the National Research Laboratories, (ii) Reports of work done elsewhere with financial assistance from the National Research Council. All of these reports have been arranged in chronological order of publication and numbered in sequence. This new series of publications is preceded by the letters "N.R.C. No.".

The Canadian Journal of Research has not been included in the N.R.C. No. series. Established as a medium for the publication in Canada of the results of original scientific research carried on in the Dominion, the Canadian Journal of Research is now published in four sections: A—Physical Sciences; B—Chemical Sciences; C—Botanical Sciences; D—Zoological Sciences. The Journal has a wide circulation and is to be found in the leading scientific libraries of the world. From its inception in May, 1929, to the end of Volume 12 in June, 1935, the Journal was issued in a single volume each month. *Copies of these 12 volumes unbound are available at $1·50 each. An index of volumes 1-12 is available at $1.* From July, 1935, the Journal has been published in four sections as noted above. Each section is paged separately. Sections A and B are bound in one cover each month and Sections C and D are likewise bound together. The issues from July to December, 1935, were included in Volume 13 (*Price $2*). Volume 14 contains the Journals issued in 1936 and one volume has been published each year since then. *Single numbers of the Journal are priced at 50 cents each; the yearly subscription for Sections A and B is $2·50; Sections C and D, $2·50; the four sections complete $4.*

Additional information regarding Council publications and reports of Council activities may be obtained from the Officer-in-Charge, Research Plans and Publications Section, National Research Council, Ottawa, Canada.

National Revenue.—Annual Report, containing statements relative to Imports, Exports, Excise, and Income. National Revenue Review (monthly).

Pensions and National Health.—(1) Sanitation—Sewage Treatment for Isolated Houses and Small Institutions where Municipal Sewage System is not available; (2) The Canadian Mother's Book; (3) Infantile Paralysis; (17) Wells; (18) Home Treatment, Rural Water Supplies; (19) Athletes' Foot; (21) Housing; (22) A Survey of Vitamins; (23) Air Conditioning and Heating in Relation to Health; (24) Information for Men—Syphilis and Gonorrhœa; (25) Information for Young Women about Sex Hygiene; (26) Information for Parents—Teaching Sexual Hygiene to Children; (27) Prevention of Blindness in Babies; (29a) Goitre—Facts for the General Public; (30) How to Build Sound Teeth; (31) What You Should Know about Tuberculosis; (32) Smallpox and Vaccination; (34) The Rat Menace.

Post Office.—Annual Report of the Postmaster General. Official Postal Guide. Regulations as to Rural Mail Delivery. Booklet of Postal Information.

Public Archives.—*Annual Reports.*[1]—1914-15 *(60 cents)*; 1921 *(30 cents)*; 1923 *(55 cents)*; 1926 *(10 cents)*; 1928 *(25 cents)*; 1929 *(50 cents)*; 1930 *(50 cents)*; 1931 *($1)*; 1932 *($1)*; 1933 *($1)*; 1934 *(10 cents)*; 1935 *($1)*; 1936 *($1)*; 1937 *($1)*; 1938 *($1)*.

Numbered Publications.—No. 9, Early Canadian Northwest Legislation—Oliver (2 Vols.) (1914-15), *$2;* No. 12, Reports on the Laws of Quebec, 1767-70—Kennedy and Lanctot (1931), *$1;* No. 13, Vol. I, Catalogue of Pamphlets,[2] 1493-1877—Casey (1931), *$1;* Vol. II, Catalogue of Pamphlets,[2] 1878-1931—Casey (1932), *$1.*

Special Publications.—(h) Documents—Constitutional History of Canada, 1759-91—Shortt and Doughty, 2 ed. (2 Vols.), (1918), *$2; (i)* Catalogue of Pictures, etc.,[3] Part I, Sec. 1—Kenney (1925), *$2·50, (j)* Documents—Canadian Currency, Exchange, etc., during the French Period[4]—Shortt (2 Vols.), (1925-26), *$3; (l)* The Kelsey Papers[5] (Hudson Bay Co. Journals, 1683-1722)—Doughty and Martin (1929), *$2; (m)* Documents—Currency in Nova Scotia[6] 1675-1758—Shortt, Johnston, Lanctot (1933), *$2; (n)* Documents—Constitutional History of Canada, 1819-28—Doughty and Story (1935), *$2; (o)* The Elgin-Grey Papers,[7] 1846-52—Doughty (4 Vols.) (1937), *$5.*

---

[1] Contain texts, calendars, and catalogues of documents as well as reports on the administrative work of the Divisions.

[2] Title page and introduction in English and French, same volume; titles of pamphlets as in original; index in English.

[3] Title, preface, and introduction in English and French in same volume; notes in English; titles of pictures exact.

[4] Complete volumes, including index in English and French in same volume.

[5] Title and introduction in English and French in same volume notes and index in English; texts of journals exactly as in original (English).

[6] Title and foreword in English and French, otherwise in English.

[7] Title and introduction in English and French, otherwise in English.

Public Works.—Annual Report.

Secretary of State.—Annual Report. The Arms of Canada. The Canadian Patent Office Record, *Annual subscription, $10, single numbers, 10 cents.* Annual Report of the Commissioner of Patents, *Price 10 cents.*

Trade and Commerce.—Annual Report of the Department of Trade and Commerce, *Price 25 cents;* Annual Report of the Board of Grain Commissioners for Canada, *Price 25 cents;* Annual Report of Electricity and Gas, *Price 25 cents;* Annual Report of Dominion Grain Research Laboratory, *Price 10 cents;* List of Licensed Elevators, etc., *Price 50 cents;* Motion Pictures (catalogue of), *Price 25 cents.*

Note.—*Requests for the above publications should be addressed to the King's Printer.*

Commercial Intelligence Service.—Commercial Intelligence Journal.—Published weekly in English and French, containing reports of Trade Commissioners and other commercial information. *Annual subscription, Canada, $1, outside Canada, $3·50.*

Note.—*Publications of the Commercial Intelligence Service are compiled with a view to furnishing Canadian exporters with information respecting the possibilities for the sale of Canadian goods abroad, the nature of the competition to be encountered, Customs requirements, etc., and are not intended for general distribution. The publications available include leaflets giving Invoice Requirements and a series on Points for Exporters, both covering countries included in the territories assigned to Trade Commissioners. From time to time special reports are issued separately, which subscribers to the Commercial Intelligence Journal are entitled to receive free of charge. In all other cases their distribution is controlled by the King's Printer, who fixes a price therefor.*

Dominion Bureau of Statistics.—(For the publications of the Dominion Bureau of Statistics see pp. 1108 to 1120.)

Transport.—Annual Report of the Department of Transport, *Price 50 cents. Canal Services.*—Canals of Canada, *Price 10 cents.* The Trent Canal System, *Price 10 cents.* Canal Rules and Regulations, *Price 10 cents.* Churchill and the Hudson Bay, *Price 10 cents.* Welland Ship Canal, 1934, *Price 10 cents.*

(Obtainable from the Assistant Deputy Minister and Secretary, Department of Transport, Ottawa)—The Quebec Bridge, 2 Vols., *Price $5.* The Welland Ship Canal, 1913-33, *Price $10.* St. Lawrence Waterway Project, Report of Joint Board of Engineers, with plates, *Price $5.* Report of Conference of Canadian Engineers on the International Rapids Section, *Price $2·50.* Report of Joint Board of Engineers (reconvened), *Price $2·50.*

Marine Services.—International Convention Respecting Loan Lines, etc., *Price 50 cents.* International Convention for the Safety of Life at Sea, *Price 25 cents.* Regulations for the Examination of Seamen and Others for Certificates of Efficiency of Life-boatmen, *Price 10 cents.*

(Obtainable from the King's Printer, Ottawa)—Regulations, Government Wharves in Canada (French and English), *Price 10 cents.* Rules and Regulations Relating to the Examination of Masters and Mates of Foreign-Going Ships (French and English), *Price 25 cents.* Rules and Regulations Relating to the Examination of Masters and Mates of Home Trade, Inland and Minor Waters Vessels (French and English), *Price 25 cents.* Rules of the Road, International (French and English), *Price 10 cents.* Rules of the Road, Great Lakes (French and English), *Price 10 cents.* River St. Lawrence Ship Channel, including Tide Tables (French and English), *Price 25 cents.* Regulations for the Loading and Carriage of Grain Cargos, *Price 10 cents.* Expedition to Hudson Bay, N.B. McLean, Director in Charge, 1927-28, *Price 50 cents.* Inspection of Boilers and Machinery of Steamships (French and English), *Price 10 cents.* Rules for Life-Saving Appliances (French and English), *Price 10 cents.* Rules for Inspection of Hulls and Equipment (English only), *Price 10 cents.* Rules for Motor Engineers' Certificates (English only), *Price 10 cents.* Rules for Examination of Engineers on Steamships (French and English) *Price 10 cents.* Rules for Fire Extinguishers on Steamships (English only), *Price 10 cents.* Instructions as to the Inspection of Boilers and Machinery of Steamships (French and English), *Price 10 cents.* Regulations respecting Life Saving Appliances (French and English), *Price 10 cents.* Regulations relating to the Inspection of Hulls and Equipment of Steamboats (French and English), *Price 10 cents.* Regulations relating to the Issue of Motor Engineer Certificates (French and English), *Price 10 cents.* Regulations relating to the Examination of Engineers (French and English), *Price 10 cents.* Regulations respecting Fire Extinguishing Equipment (French and English), *Price 10 cents.* Load Line Rules for Ships Making Voyages on Lakes or Rivers, *Price 10 cents.* General Load Line Rules, *Price 10 cents.* Regulations for the Protection Against Accident of Workers Employed in Loading or Unloading Ships, *Price 10 cents.* General and Special Regulations (French and English), *Price 10 cents.* List of Canadian Shipping, *Price 50 cents.* List of Lights, etc., in Canada: *(a)* Pacific Coast, *Price 15 cents; (b)* Atlantic Coast, *Price 35 cents*; *(c)* Inland Waters, *Price 25 cents.*

(Obtainable from the King's Printer, Ottawa)—International Tele-communication Convention of Madrid, 1932, together with Radio Communication Regulations (Revision of Cairo, 1938) annexed thereto, *Price 25 cents.* Radiotelegraphy Requirements for Ships registered in Canada and engaged on international voyages in accordance with the Safety of Life at Sea and Loadline Conventions Act, 1931, and the Regulations issued thereunder, *Price 10 cents.* Bulletin No. 2 (1932) Radio Inductive Interference, *Price 35 cents.* Supplement "A" (1934) to Bulletin No. 2, *Price 15 cents.* Navigation Conditions on the Hudson Bay Route from the Atlantic Seaboard to Fort Churchill, seasons of navigation 1929-38, *Price 10 cents.* Hudson Bay Report, 1927, *Price 25 cents.*

Air Services.—(Obtainable from the Chief of Air Services, Department of Transport, Ottawa)—Air Regulations, Canada, *Free.* The Air Regulations 1938, *Free.* Information Circulars to Civil Air Pilots and Aircraft Owners—revised annually, *Free.* Information Circulars to Air Engineers and Aircraft Owners—revised annually, *Free.* Sequence of Flying Instruction 1938—a special edition of the R.C.A.F. publication, published through the courtesy of the Chief of the Air Staff, *Free.* Training for Civil Aviation, *Free.* Air Engineers' Certificates, Conditions of Issue and Instructions to Applicants, *Free.* Aerial Navigation, *Free.* Airways Bulletin No. 1—a description of Airports, Intermediate Aerodromes, Seaplane Ports and Anchorages in the Dominion of Canada, *Free.* Map Showing Radio Stations Operated as Aids to Navigation, 1935, *Price 25 cents.* British Postmaster General's Handbook for Wireless Telegraph Operators, *Price 25 cents.* Kilocycle-Metre Conversion Chart, *Price 10 cents.* The Radio Act, 1938 and Regulations issued thereunder, *Price 10 cents.* Pamphlet containing Extracts from the Radio Act, 1938, and Regulations issued thereunder with reference to Amateur Experimental Stations, *Free.* Notice to Mariners, Radio Aids to Navigation, 1939, *Free.* Pamphlets containing Examination Procedure for Certificates of Proficiency in Radio for Commercial Operators, *Free.*

[*Obtainable from the Meteorological Office, 315 Bloor Street West, Toronto (5), Ontario*]—Monthly Record of Meteorological Observations in Canada and Newfoundland, *Price, single copies 10 cents, yearly subscription $1.* Monthly Weather Map, *Price, single copies 10 cents, yearly subscription $1.* Daily Weather Map—Toronto edition, *yearly subscription, $4.* Annual Reports (1895-1915), *Price $1.*

(Obtainable from the Meteorological Office, 1178 Grain Exchange Building, Winnipeg, Manitoba)—Daily Weather Map—Winnipeg edition (includes weekly bulletin during agricultural season), *yearly subscription, $4.*

Canadian Travel Bureau.—Canada Calls You; How to Enter Canada; Canada (recreational folder); Sport Fishing in Canada; Canada's Game Fields; Canoe Trips in Canada; Canoe Trips to Hudson Bay; Sport and Travel in Canada; Trans-Canada Automobile Trip; Canada and United States Road Map, General, Eastern, Central and Western sheets.

Section 4.—Publications of Provincial Governments.

PRINCE EDWARD ISLAND.

Journal of the Legislative Assembly. Statutes. Royal Gazette. Annual Reports of the Provincial Auditor on Public Accounts, Education, Agriculture, Falconwood Hospital (for the insane) and Provincial Infirmary, Vital Statistics and Public Health. Comparative Statement of Public Finance, 1925-1938.

NOVA SCOTIA.

Royal Gazette. Statutes, Journal and Proceedings of the House of Assembly. Journal of Education. Manual of the Public Instruction Acts and Regulations of the Council of Public Instruction. *Annual Reports.*—Public Accounts; Public Health (including Vital Statistics, Humane Institutions, Penal Institutions, Child Welfare, Nova Scotia Training School for Mental Defectives, Victoria General Hospital, Nova Scotia Hospital, Nova Scotia Sanatorium, Mothers' Allowances, Old Age Pensions); Education; Fire Marshal; Mines; Provincial Museum and Science Library; Public Archives; Legislative Library; Provincial Secretary (including Rural Telephone Companies, Board of Censors); Department of Agriculture; Department of Highways; Department of Lands and Forests; Department of Labour (including Minimum Wage Board, Employment Service Offices, Inspection of Factories, Unemployment Relief); Statistics of Incorporated Cities, Towns and Municipalities; Printing; Transient Poor; Public Utilities Board; Workmen's Compensation Board; the Power Commission; Liquor Control Commission; Nova Scotia Housing Commission; Royal Canadian Mounted Police (Nova Scotia section). *Special Reports.*—Milk and Cream Inquiry; Franchise Inquiry; Investigation into workings of Compensation Board; Submission by the Government of Nova Scotia to the Royal Commission on Dominion-Provincial Financial Relation.

NEW BRUNSWICK.

Royal Gazette. Statutes. Annual Reports of the Comptroller General, of the Board of Health, of the Department of Education and Agriculture (including Horticulture). Annual Reports on Public Works, Crown Lands, the Hospital for the Insane; Report of the Jordan Memorial Tuberculosis Sanatorium at River Glade; Report of Women's Institutes; Report of the Workmen's Compensation Board; Report of Public Utilities Commission; Report of New Brunswick Hydro-Electric Power Commission; Boys' Industrial Home, Saint John, Report; New Brunswick Liquor Control Board Report; Old Age Pensions Board Report; New Brunswick Fire Prevention Board Report; Motor Carrier Board Report; Department of Federal and Municipal Relations Report; and Report of Fair Wage Board.

QUEBEC.

Note.—*The titles of publications available in the English language are printed in English.*

Attorney General.—Annual List of Public Officers of the Province of Quebec.

Tourist Bureau.—[Publications marked (1) are bilingual; (2) French; (3) English.]

(1) Official Highway and Tourist Map (yearly); (3) La Province de Québec—historic, romantic, picturesque (64 pp. quide, illustrated); (3) Hunting and Fishing in Quebec; La Province de Québec—pays de l'histoire, de la légende et du pictoresque (32 pp. guide, illustré); (3) The Gaspé Peninsula (32 pp. de luxe booklet).

Municipal Affairs, Trade and Commerce.—Annual Report of the Minister of Municipal Affairs; List of Municipal Corporations (annual); Statistical Year Book; Education Statistics; Financial Statistics of School Corporations; Municipal Statistics (annual); Meteorological Bulletin (monthly); Butter and Cheese Production (monthly); Agricultural Statistics reports; Co-operative People's Banks and Agricultural and Co-operative Societies.

Health and Provincial Secretary.—Annual Report of the Secretary and Registrar; Annual Report of the Department of Health; the Quebec Official Gazette, bilingual (weekly); The Statutes of the Province (annual); Revised Statutes of the Province (1925); Rapport de l'Archiviste (annual); Monuments commémoratifs de la province de Québec—P.-G. Roy; Report of the Director of Public Charities.

Treasury.—Annual Statement of Public Accounts; Annual Estimates; Annual Budget Speech; Annual Report on Insurance Companies; Annual Report on Mutual Benefit Associations; Annual Report on Trust Companies.

Bureau of Revenue.—Annual Report of the Quebec Liquor Commission; Annual Report of Motor Vehicle Registrations; Statistics of Automobile Accidents.

Lands and Forests.—Annual Report of the Minister; Circular No. 1, La rouille vesiculaire du pin blanc—G.-C. Piché; Nomenclature of the Geographical Names in the Province of Quebec, Quebec Geographical Commission; Dictionnaire des Lacs et Rivières; Annual Report of the Quebec Streams Commission; Notes on the Forests of Quebec—G.-C. Piché; Rapport du Service de Protection; Tableau des forces hydrauliques concédées de 1867 à 1923 (Supplément 1923 au 7 avril 1930); Forests and Waterfalls; Quebec, Natural Resources.

Agriculture.—*Annual Reports.*—Department of Agriculture; Pomological Society; *Bulletins.*—(55) Poultry Raising in Towns and Villages; (40) How to Plant your Fruit trees; (44) Vegetable Culture; (89) The Drainage of Farm Lands; (90) Experiments with Grain Crops; (92) The Corn Borer; (95) Farm Account Book; (100) Soils Drainage; (103) Les Mauvaises Herbes; (115) Vegetable Garden; (118) Guide de la protection des cultures; (122) Culture du tabac; (123) Cueillette et emballage des pommes; (124) Arrosage du verger commercial (French and English); (125) Culture de la tomate, du piment et des aubergines; (127) Plantation d'un verger commercial; (135) Les arrosages du verger; (137) Polyarthrite du poulain; (138) L'Exploitation du Troujeau Laitier. *Circulars.*—(42) Sélection des troupeaux de volailles; (125) Guide des cercles de fermières; (65) Common Weeds and their Control; (66) Alfalfa Growing in Quebec. *Miscellaneous.*—(293) The Maple, Pride of Quebec.

Highways.—Annual Report of the Minister of Highways (bilingual); An Act Respecting the Roads Department (1934) (separate French and English editions).

Mines and Fisheries.—Extracts from Reports on the District of Ungava—T. C. Denis (1929); Geological Sketch and Economic Minerals of the Province of Quebec (1924); Annual Reports on Mining Operations in the Province of Quebec; Annual Reports of the Quebec Bureau of Mines, years 1929 to 1936; The Laurentide National Park.

Colonization.—Annual Report of the Minister; Le Guide du Colon, 1932; Quebec Ready Reference.

Labour.—Minister's Report; Workmen's Compensation Act; Annual Report of the Workmen's Compensation Commission; Report of the Quebec Social Insurance Commission.

Public Works.—Minister's Report; Statistics of Fire Losses in the Province.

Public Instruction.—Code scolaire (1927); The Education Act (1911); Regulations of the Catholic Committee (1936); Regulations of the Protestant Committee (1921); Memoranda of Instructions to Teachers for Intermediate and High Schools (1934); Annual Report; Financial Statement of the Superintendent of Public Instruction (annual); Mon premier livre (1st and 2nd parts) (1900), a new edition of which is printed every year; l'Enseignement primaire; Educational Record; Yearly circulars containing Instructions to School Boards and School Inspectors; Course of English and French for English Catholic Schools (1926); Manual respecting the course of study in the Protestant Elementary Schools; List of authorized text books.

Legislative Council.—Agenda Paper of the Legislative Council; Votes and Proceedings of the Legislative Council; Journals of the Legislative Council; Rules and Regulations of the Legislative Council.

Legislative Assembly.—Agenda Paper of the Legislative Assembly; Votes and Proceedings of the Legislative Assembly; Journals of the Legislative Assembly; Sessional Papers, Departmental Reports and Returns to Orders and Addresses of the Legislative Assembly; Report of the Clerk of the Crown in Chancery on Elections (published after every general election); Report of the Librarian of the Legislature; Annotated Rules and Standing Orders of the Legislative Assembly of Quebec; Private Bills in the Legislative Assembly of Quebec (a manual containing the rules relative to); Government and Legislature; List of the Chairmen and Members of the Committees of the Legislative Assembly.

ONTARIO.

Agriculture.—*Annual Reports*.—Minister of Agriculture; Agricultural College and Experimental Farm; Agricultural and Experimental Union; Stallion Enrolment Board; Agricultural Statistics; Vegetable Growers' Association; Entomological Society; Agricultural Societies; Horticultural Societies; Annual Report of Ontario Veterinary College. *Bulletins*.—Fruits.—(335) The Strawberry in Ontario (rev. 1938); (342) Fire Blight (1929); (354) The Pear (1930); (355) The Raspberry and Blackberry (rev. 1938); (356) Insects Attacking Fruit Trees (1930); (383) Peach Yellows and Little Peach; (391) The Grape in Ontario (1938); (392) Pruning the Tree Fruits (1938). General Farming.—(218) Birds of Ontario in Relation to Agriculture, *Price 25 cents;* (296) Sweet Clover (rev. 1928); (326) Farm Barns (1927); (327) Knots and Splices; Rope on the Farm (1937); (331) Public Speaking and Debate (1933); (348) Amateur Dramatics (1929); (349) Grain Smuts; (360) Farm Underdrainage (1931); (364) Manures and Fertilizers (1931); (370) Testing Milk, Cream, and Dairy By-Products on the Farm and in the Factory; (371) Buttermaking on the Farm (1936); (372) Soft Cheese Making and Farm Dairy Cheddar Cheese (1936); (385) Cheese Mites and Their Control (1937); (397) Mushrooms in Ontario, *Price 10 cents;* (398) Farm Water Supply (1939); (399) Plumbing and Sewage Disposal for the Farm Home (1939). Livestock.—(304) Infectious Abortion of Cattle (rev. 1938); (337) Parasites Injurious to Sheep (1928); (338) Hints on Judging (1931); (350) The Warble Flies (1934); (373) Dairy Cattle (1933); (378) Bot Flies and Their Control (1934); (380) Parasites Injurious to Swine (rev. 1938); (387) Swine Diseases and Their Prevention; Swine Feeding (1937); (396) Mastitis or Gorget in Cows (1938); (401) Feeding and Management of the Work Horse (1939); (402) Breeding and Management of the Draft Horse (1939). Poultry.—(363) Parasites Injurious to Poultry (1931); (394) Diseases of Poultry (1938); (395) Farm Poultry (1938); (400) Turkey Production (1939). Vegetables.—(358) The European Corn Borer (1931); (386) Diseases of Vegetables (1937); (388) Vegetable Gardening; (393) Insects Attacking Vegetables (1938). Bees.—(384) Bee Diseases (1933). *Circulars*.—(10) Varieties of Farm Crops; (15) Livestock Shipping Association; (16) Home Pasteurizing of Milk; (38) Cream before Pasteurization as a Factor in Butter-making; (39) Beef Rings; (41) Sweet Clover; (47) A Study of the Oat Nematode; (48) Popcorn; (49) Eradicate the Common Barberry; (51) Perennial Sow Thistle; (52) Liver Disease of Horses; (54) Dodder; (55) Home Mixing of Fertilizers; Navel Ills of Foals. *Specials*.—An Economic Analysis of Cheese Factory Operations in Ontario; Destruction of Wolves; Farm Account Book, *Price 25 cents;* Fruits of Ontario, *Price 50 cents;* Probable Causes and the Remedies for Defects in Second Grade Cream; Soil Management and Fertilizer Recommendations; The Value of Birds to Man; Tobacco Soils in Norfolk County. *Acts*.—Ditches and Water Course Act; Weed Control Act.

Attorney General.—Reports of Inspector; Legal Offices; Insurance; Loan and Trust Corporations; Annual Report of Commissioner of Provincial Police.

Education.—Annual Report of the Minister of Education; School Acts; Regulations and Courses of Study: (1) Public and Separate Schools, (2) Continuation Schools, (3) High Schools and Collegiate Institutes; Courses of Study and Examinations in Schools Attended by French-speaking Pupils; General Announcement of Summer Courses; Text Book Regulations, including list of text books authorized and their prices; The list of school manuals with their prices; Summer Schools for training of Teachers; Regulations and Courses of Study of the University of Ottawa Normal School; Syllabus of Normal School Courses and Regulations for First Class and Kindergarten-Primary Certificates; List of Teaching Days of High, Continuation, Public and Separate Schools; Recommendations and Regulations for Vocational Schools, etc.; Recommendations and Regulations for Agriculture and Household Science Departments; High School Entrance Examination Regulations; Annual Departmental Middle and Upper School Examinations; Announcement *re* the Carter Scholarships; The School Attendance Acts and the Recommendations and Regulations and the Part Time Courses; The Consolidation of Rural Schools; Regulations for Consolidated Schools; Accommodation, Equipment and Grants for Auxiliary Training Classes; Literature Selections for Departmental Examinations; Regulations, Medical and Dental Inspection, Public and Separate Schools; Schools and Teachers for the Province of Ontario, 1938.

Game and Fisheries.—Annual Report, Department of Game and Fisheries; The Game and Fisheries Act and Regulations; Summary of the Game and Fisheries Act and Regulations; Report of the Special Fish Committee, 1928-30; Report of the Special Game Committee, 1931-33; The Small Mouthed Black Bass and its Conservation; The Maskinonge and its Conservation; Monthly Bulletin of the Department.

Health.—*Acts.*—The Public Health Act; The Vaccination Act; The Venereal Diseases Prevention Act; The Cemetery Act; The Public Hospitals Act; The Private Hospitals Act; The Sanatoria for Consumptives Act; The Maternity Boarding House Act; The Mental Hospitals Act, 1935; The Private Sanitarium Act; Registration of Nurses Act; An Act Respecting the Fumigation of Premises; Milk Control Act, 1934; The Bedding Act. *Regulations.*—Regulations for the Control of Communicable Diseases; Regulations Respecting Venereal Diseases; Regulations Respecting the Manufacture of Non-Intoxicating Beverages, Distilled and Mineral Water, and the Manufacture of Syrups, Wines and Brewed Beer; Regulations for the Sanitary Control of Lumber and Mining Camps; Regulations Governing the Construction and Management of Swimming Pools; Regulations *re* Cross Connection of Water Supplies; Regulations pursuant to the Mental Hospitals Act, 1935; Regulations pursuant to the Public Hospitals Act; Regulations regarding Private Hospitals; Rules and Regulations relating to the Registration of Nurses; Regulations for the Use of Hydrocyanic Acid or Cyanide Compounds for Fumigation; Regulations under the Bedding Act; Regulations *re* Milk and Pasteurization Plants. *Publications.*—Annual Report upon the Public Hospitals, Private Hospitals, Hospitals for Incurables, Convalescent Hospitals, and Sanatoria for Consumptives; Annual Report of the Department of Health; Annual Report upon the Ontario Hospitals for the Mentally Ill, Mentally Sub-normal, and Epileptic. *(Pamphlets upon various subjects relating to Health may be obtained from the Department of Health, Parliament Buildings, Toronto.)*

Highways.—Annual Report, Department of Highways; The Highway Traffic Act, 1937, with Amendments and Regulations; The Commercial Vehicle Act, 1937, with Amendments and Regulations; The Public Vehicle Act, 1937, with Amendments and Regulations; The Highway Improvement Act, 1937, with Amendments; The Gasoline Tax Act, 1937, with Amendments and Regulations; the Gasoline Handling Act, 1937, with Amendments and Regulations; Province of Ontario Road Map, *Free on application;* County Road Maps, *Price 10 cents per map.*

Labour.—*Legislation.*—Department of Labour Act; Factory, Shop and Office Building Act; Steam Boiler Act; Canadian Interprovincial Regulations for the Construction and Inspection of Boilers, Tanks and Appurtenances; Operating Engineers Act and Regulations Governing the Issuance of Certificates; Employment Agencies Act and Regulations Governing Employment Agencies; Apprenticeship Act and General Regulations Governing the Training of Apprentices in Designated Trades and Trade Regulations concerning each trade designated; Regulations Respecting the Protection of Persons Working in Compressed Air; Regulations Respecting the Protection of Persons Working in Tunnels or Open Caissons; Minimum Wage Act; Minimum Wage Orders; Industrial Standards Act and Schedules of Wages and Hours approved by Order in Council. *Reports.*—Annual Report of the Department of Labour, including the reports of the Ontario Government Offices of the Employment Service of Canada; Factory Inspection Branch; Boiler Inspection Branch; Board of Examiners of Operating Engineers; Industry and Labour Board; Apprenticeship Branch; Minimum Wage Branch; Industrial Standards Branch and Conciliation and Negotiation Branch. *Text Books.*—Why Certificates for Stationary and Hoisting Engineers; Boilers; Engines, Turbines, Condensers, Pumps; Refrigeration and Air Compression; Combustion; Beginners Book on Power Plant Operation; Steam Plant Accessories.

Lands and Forests.—Annual Report; Pamphlet on Summer Resort Lands; Forest Trees for Distribution; Forest Tree Planting; Settlers' Lands; Gathering Pine Cones; List of Townships; Forest Resources of Ontario.

Mines.—The Mining Act, R.S.O., 1937, (Chapter 45, with amendments to date). Handbook—Ontario's Mines and Mineral Resources, (sixth edition, 1936), Vol. XLVII, Part I, 1938; Report of the Mineral Production of Ontario in 1937; Report of Royal Ontario Nickel Commission, 1917, *Price $5*; Report of Ontario Iron Ore Committee, 1923, *Price $2*; Volume XXX, Part II, Ontario Gold Deposits; Volume XXXIII, Part II, 1924, Porcupine Gold Area, *Price $2*; Final Report of Joint Peat Committee, 1925, *Price $1*; Volume XXXVII, Part II, 1928, Kirkland Lake Gold Area, *Price $2*; Bulletin No. 25, List of Publications (third edition) with Supplements, giving all reports issued up to January, 1938; Bulletins Nos. 80 and 93, Money and the World Crisis; Prospector's Guide to Ontario Mining Fields (fourth edition, 1936).

Premier.—Reports of the Liquor Control Board of Ontario and the Temiskaming and Northern Ontario Railway Commission; Tourists' Handbook; Report of the Niagara Parks Commission; Ontario Research Foundation Report; Hydro-Electric Power Commission's Report.

Provincial Secretary.—*Annual Reports.*—Prisons and Reformatories, including Ontario Board of Parole; Annual Report of the Secretary and Registrar of the Province of Ontario (this report is presented to the Legislative Assembly each year, but has not been printed for several years); Annual Report of Births, Marriages and Deaths; The Companies Act, including the Extra-Provincial Corporations Act; The Mortmain and Charitable Uses Act; The Companies Information Act, and the Corporation Securities Registration Act; The Marriage Act; The Vital Statistics Act; Physicians' Pocket Reference to the International List of Causes of Death.

NOTE.—*The Physicians' Pocket Reference to the International List of Causes of Death is published by the Dominion Bureau of Statistics, but copies are kept in this Branch for purposes of distribution.*

Public Works.—Annual Report of the Minister, with reports of the Deputy Minister, Architect, Engineer, Secretary, and Accountant.

Treasury.—Annual Statements; Estimates of Expenditure; Public Accounts; Budget Address of Treasurer delivered in the Legislative Assembly; Auditors' Report; Report of the Board of Censors of Motion Pictures.

MANITOBA.

Agriculture.—*Booklets.*—Annual Crop and Live Stock Reports. *Bulletins and Circulars.*—Sweet Clover; The Trench Silo; Making Silage in Manitoba; The Canada Thistle; Leafy Spurge; Horay Cress or Perennial Peppergrass; Noxious Weeds Act; Great Ragweed; Annual Forage Crops for Manitoba; Dog Mustard; Stinkweed and Common Wild Mustard; The Russian Thistle; ABC of Manitoba Weeds; Dodder; False Ragweed; The Gopher Pest in Manitoba; An Agricultural Program for Southwestern Manitoba; Crop History and Crop Outlook in the Melita Area; Sow Thistle Control; Control of Wild Oats; Preparing Grain for Exhibition Purposes; Production of Cereals in Manitoba; Forage Crop Calendar; How to Kill Couch Grass; Growing Better Potatoes; Milk and Cream Tests; Producing the Best Cream; Farm Butter-Making; Cheese-Making on the Farm; The Cream Separator on the Farm; Hatching, Brooding, Rearing and Feeding Chicks; Poultry Houses for Manitoba; Turkey Raising in Manitoba; Sheep in Manitoba; Manitoba Rations for Animals and Poultry; Have You Dehorned your Market Cattle; Producing Onions in Manitoba; Asparagus Growing in Manitoba; Annual Flowers for Outdoor Sowing; Growing Sweet Corn; Growing and Using Tomatoes; Manitoba Fruit List; Growing Raspberries in Manitoba; Growing and Using Gooseberries; Growing Strawberries in Manitoba; Making and Caring for Lawns; Use of Bulbs for Winter Bloom; Grafting and Budding Tree Fruits; The Gladiolus; Shrubs for Manitoba; Varieties of Vegetables for Manitoba Gardens; Vegetable Insects and their Control; Growing Better Rhubarb; The Beef Ring; Help for the Home Dressmaker; Fitting and Alteration of Dress Patterns; First Lessons in Sewing; Stain Removal and Dyeing; The Preparation of Whitewash; Canning, Pickling and Preserving; Facts about Manitoba.

Education.—Annual Report; Program of Studies, Elementary and Senior; Public School Act; Regulations; Beautification of School Grounds.

Municipal Commissioner.—Statistical information respecting the Municipalities of the Province, and list of names and addresses of Administrative and Health Officials of each Municipality, Manitoba Tax Commission.

Public Works.—Annual Report, included in Sessional Papers; Report of Insurance.

Attorney General.—Annual Report; Government Liquor Commission; Workmen's Compensation Board; Annual Report of Manitoba Telephone System.

Provincial Treasurer.—Public Accounts; Estimates; Budget Speech; Report of Manitoba Farm Loan Association.

Provincial Secretary.—Manitoba Gazette; Journals and Sessional Papers; Statutes of the Province.

Mines and Natural Resources.—Annual Report; Manitoba Mines and Minerals, 1928; A Guide for Prospectors; Tourist Guide; Fishing is Good in Manitoba; Mining Maps; Sectional Land Maps; Shelterbelts and the Farm Woodlot (1938); "The Whiteshell".

Health and Public Welfare.—Annual Report; Monthly Pre-natal and Post-natal Letters; Manitoba Baby; Manitoba Child; Child Study Material for Small Community Groups; Patterns for Infants' Layettes, *Price 10 cents* Regulations *re* Boarding Homes for Children, Maternity Homes, and Day Nurseries; Quarantine Regulations; The Common Cold; Measles; Scarlet Fever; Diphtheria; Diphtheria Immunization; Whooping Cough; Trachoma; Typhoid Fever; Health Training Material for Teachers.

Publications issued by the Dominion Department of Pensions and National Health, The Canadian Council on Child Welfare, The Canadian National Institute for the Blind, also used in educational service.

SASKATCHEWAN.

Agriculture.—Annual Report of the Department of Agriculture; Annual Reports of Branches, etc.: Dairy, Live Stock, Field Crops, Statistics, Co-Operation and Markets, Bee Division, Report of Extension Department of College of Agriculture; Commission Marketing Reports: Live-Stock Marketing; Bulletins and leaflets on Live Stock, Field Crops, Dairying, Tillage Methods, etc.

Other Publications.—*Annual Reports.*—Bureau of Labour and Public Welfare; Department of Education; Department of Highways and Transportation; Department of Municipal Affairs; Department of Provincial Secretary; Department of Public Works; Department of Public Health; Department of Telephones; Department of Natural Resources; Local Government Board; Public Accounts; Cancer Commission; Mental Hospital; The Saskatchewan Gazette. *By Bureau of Publications.*—Weekly News Bulletin; Pamphlets relating to tourist attractions, higgways, natural resources, industries, etc., of Saskatchewan.

ALBERTA.

Agriculture.—Weekly Dept. of Agriculture Notes; Alberta Agricultural Report (Fortnightly, May to September); Annual Report; Statistical Summary of Production for previous year; Calendar of Provincial Schools of Agriculture; Farm Women's Week (circular); Farm & Home Week (circular). *Bulletins.*—Turkey Production in Alberta; Brooding and Rearing of Chicks; Poultry Diseases in Alberta; Planning and Beautifying Home Grounds; Flowers Beautify the Home; Equine Encephalomyelitis; Warble Fly Control; Care, Feeding and Management of Swine; Beekeeping in Alberta; The Production of Milk for Cheese Making; Tentative Suggestions for the use of Fertilizer in Alberta; Weeds of Alberta; Leaflets on Weed Control; Destruction of Gophers; Preservation of Fruits, Vegetables and Meats; Home Laundry Hints; Report on the Rehabilitation of the Dry Area.

Education.—Annual Report; Program of Studies for the Elementary School; Promotion Tests for Grade VIII; Departmental Examinations for Grades IX-XII; Pamphlets on Picture Study, Architecture and Sculpture; Summer School Announcement; Normal School Announcement; Program of Studies for Technical High Schools (revised 1932 and 1937); Regulations of the Department of Education governing the course of study in Grades VII, VIII and IX; High School Correspondence Courses; Suggested Time-table for One-Room Schools; Instructions Concerning the Teaching of French in the Elementary Schools; Supplement to the Program of Studies for the Elementary School—Selections for Reading; Suggestions for Seat Work in Junior Grades; Five-Figure Logarithmic Tables; Regulations of the Department of Education Relating to the Program of Studies and Annual Examinations for High Schools; Price List and Requisition Form—School-Book Branch; What Is and What Might Be in Rural Education in Alberta; Regulations of the Department of Education Relating to the Program of Studies and Annual Examinations for Commercial Schools (revised 1932 and 1937); Bulletins and Regulations covering School Buildings in Rural and Village School Districts; Series of Plans and Specifications for Teachers' Residences; Series of Plans for One- and Two-Roomed Schools, with Specifications; Annual Announcement of the Provincial Institute of Technology and Art; Courses of Study for Technical High Schools; School Act; Physical Education for Rural Schools; Physical Education for Secondary Schools; Report of Legislative Committee on Rural Education; Rural Education in Alberta; High School Civics; Instructions *re* Conduct of Examinations; Special Instructions to Presiding Examiners; Special Instructions to Presiding Examiners *re* Commercial Examinations.

King's Printer.—Alberta Gazette, *Price $2 per year.*

Lands and Mines.—Annual Report; Annual Report of the Mines Branch; Annual Oil Review.

Municipal Affairs.—Annual Report of Department; List of Alberta Municipalities.

Public Health.—Annual Report of Department; Annual Report on Vital Statistics. Bulletins issued by the Department on various health subjects. Pamphlets regarding all communicable diseases—12 in number; Alberta Mothers' Book; What you should know about Cancer (book); General Information regarding Tonsils; Health Rules for School Children; Goitre; Facts about Flies; In Times Like These (booklet on nutrition); History and Organization of Department and Boards of Health; Hospitals and Sanatoria; Protecting the Community's Food Supply; Protecting the Community's Milk Supply; Sanitary Disposal of Garbage and Sewage in the Community; Diseases Communicated by Intestinal Discharges; District Health Units; Combating Early Syphilis. *Food Bulletins.*—(1) Preparing the Less Tender Cuts of Meats; (2) The School Lunch; (3) Salads.

Public Works.—Annual Report.

Publicity.—Statistics of Progress, 1906-28; Alberta tourist literature.

Trade and Industry.—Labour Legislation; Tourist Booklet and tourist literature.

Treasury.—Budget Speech containing extracts from Public Accounts and other financial statements; Public Accounts; Estimates of Revenue and Expenditure.

Other Publications.—Annual Reports are also issued by the following Departments, Branches, and Boards:Provincial Secretary (Insurance Branch), Board of Public Utilities, Board of Industrial Relations, Workmen's Compensation Board.

BRITISH COLUMBIA.

Agriculture.—*Dairying.*—(5) Varying Butter-Fat Test; (71) Butter-Making on the Farm; (3) Cottage Cheese; (2) Farm Cheese; (1) Starters for Farm Cheese-making; (12) Rules Governing Cow-testing Associations in B.C.; (4) Clotted Cream; (17) The Story of Feed Unit; (20) First List of Dairy Sires; (22) Second List of Dairy Sires; (25) Third List of Dairy Sires; (27) Fourth List of Dairy Sires; (29) Fifth List of Dairy Sires; (32) Sixth List of Dairy Sires; (24) First Studies in Mendelism; (6) Care of Milk and Cream; (28) Certified Milk and Butter-Fat Records, 1934; (1) Ropy Milk in B.C.; (13) A Farm Dairy Sterilizer; (9) Dairy Farm Sterilizing Equipment. *Diseases and Pests.*—(45) Anthracnose; (39) Apple Aphides; (44) Apple-Scab; (34) Woolly Aphid of the Apple; (38) The Lesser Appleworm; (32) Cabbage-Root Maggot; (37) The Imported Cabbage-Worm; (2) Colorado Potato-Beetle in B.C.; (35) Currant Gall-Mite; (73) Diseases of Cultivated Plants; (66) Fire-Blight; (63) Locust-Control; (61) Making Lime-Sulphur at Home; (36) The Onion-Thrips; (41) The Oyster-Shell Scale; (31) Peach-Twig Borer; (72) Pests of Cultivated Plants; Field Crop and Garden Spray Calendar; Fruit Spray Calendar; (40) Soap Solutions for Spraying; (71) Dust Sprays; (33) Strawberry-Root Weevil. *Field Crops.*—(6) The Jerusalem Artichoke; (10) Cereal Smuts; (8) Field Corn; (12) Crop Rotation; (14) Farm Drainage; (3) Kale and Rape Crops; (15) Potato Diseases; (86) The Potato in B.C.; (7) Root-Seed Production; (98) Roots and Root-Growing; (11) Soil Fertility; (13) Soiling and Annual Hay Crops; (5) Soils, Peat and Muck; (106) Weeds and their Control; (4) Noxious Weeds. *Fruits and Vegetable Growing.*—(57) Blackberry Culture; (69) Cantaloupe-Growing in B.C. Dry Belt; (70) Celery Culture; (56) Currant and Gooseberry Culture; (43) Gardening on a City Lot; (54) Loganberry Culture; (51) Orchard Cover Crops; (53) Selection of Orchard Sites and Soils; (62) Planting Plans and Distances; (60) Pruning Fruit-Trees; (55) Raspberry Culture; (67) Rhubarb Culture; (58) Strawberry Culture; (65) Tomato-Growing in B.C.; (42) Top-working of Fruit-Trees and Propagation; (64) Varieties of Fruit recommended for Planting in B.C. *Live Stock.*—(67) Care and Feeding of Dairy Cattle; (53) Feeding Farm Live Stock in B.C.; (64) Goat-Raising in B.C.; (60) Swine-Raising in B.C.; (99) Care and Management of Sheep. *Poultry.*—(27) Breeding-Stock Hints; (32) Fattening Young Ducks; (15) Profitable Ducks; (25) Hints on Egg Hatching; (35) The Use of Feathers; (12) Management of Geese; (36) The Green Feed Deficiency in Fowls; (33) Management and Rearing of Guinea-Fowls; (39) Natural and Artificial Incubation and Brooding; (63) Poultry-House Construction; (11) Poultry-Keeping on a City Lot; (34) Care of Poultry Manure; (49) Market Poultry; (26) Practical Poultry-Raising; (19) Poultry Rations for Chicks and Layers; (80) Fur-Bearing and Market Rabbits; (28) Rabbit Recipes; (30) Sod-House Construction; (4) Management of Turkeys. *Miscellaneous.*—(92) Bee Culture in B.C.; (52) Better Farming Suggestions; (85) Clearing Bush Lands in B.C.; (50) Exhibition Standards of Perfection; Farm Account Book; (45) Judging Home Economics and Women's Work; List of Publications; (83) Preservation of Food; (66) Silos and Silage. *Reports.*—Agricultural Statistics; Climate of B.C.; Department of Agriculture Reports.

King's Printer.—British Columbia Gazette.

Lands.—*Forest Branch.*—*Circulars:* How to Obtain a Timber Sale; The Forest Resources of British Columbia; Grazing Regulations.

Mines.—Comprehensive annual reports, special bulletins, preliminary reports, etc.

British Columbia Government Travel Bureau.—British Columbia Invites You; Alluring British Columbia; Picturesque Highways of British Columbia; Hunting Game and Fishing in British Columbia; British Columbia, Canada; Synopsis of Hunting and Fishing Regulations. *Lands Series of Bulletins.*—(1) How to Pre-empt; (2) Some Questions and Answers regarding British Columbia; (3) British Columbia—Northern and Central Interior; (5) British Columbia—Southern Interior; (6) British Columbia Coast, Lower Mainland; (7) British Columbia Coast, Toba Inlet to Queen Charlotte Strait; (8) British Columbia Coast, Queen Charlotte Strait to Milbanke Sound; (9) British Columbia Coast, Milbanke Sound to Portland Canal; (10) Crown Lands, Purchase and Lease; (11) Cariboo Land Recording District; (12) Kamloops and Nicola Land Recording District; (13) Similkameen Land Recording District; (14) Vancouver Island; (15) Queen Charlotte Islands; (17) Yale Land Recording District; (18) Osoyoos Land Recording District; (20) Nelson and Slocan Land Recording District; (21) Revelstoke and Golden Land Recording District; (22) Skeena Land Recording District; (23) Stikine and Atlin Land Recording District; (24) Hazelton Land Recording District; (25) Peace River District; (26) Omineca District, Nation Lakes, etc.; (27) New Westminster Land Recording District; (28) Francois-Ootsa Lakes; (29) Endako and Nechako Rivers; (30) Stuart and Babine Lakes; (31) Vicinity of the Pacific Great Eastern Railway (Squamish to Clinton); (32) Vicinity of the Pacific Great Eastern Railway (Clinton to 52nd Parallel); (33) Central Lillooet District; (34) The Chilcotin Plateau; (35) Fort George Land Recording District, Central and Western Portions; (36) South Fork of the Fraser and Canoe River Valleys; Mount Robson Park; Strathcona Park, Vancouver Island.

Section 5.—Reports of Dominion and Provincial Royal Commissions, Together with a Selection of Reports of British Royal Commissions Having a Bearing on Canada.*

DOMINION ROYAL COMMISSIONS.

NOTE.—REPORTS OF IMPORTANT ROYAL COMMISSIONS BACK TO 1870 HAVE BEEN INCLUDED, BUT ONLY THOSE REPORTS WHERE A PRICE IS QUOTED ARE IN PRINT; THESE MAY BE OBTAINED FROM THE KING'S PRINTER, OTTAWA. FOR PRE-CONFEDERATION COMMISSIONS SEE ALSO: "A FINDING-LIST OF ROYAL COMMISSION REPORTS IN THE BRITISH DOMINIONS"; A. H. COLE., COMP., HARVARD U.P., 1939 (p. 87+).

Royal Commission on the Improvement of the Inland Navigation of the Dominion of Canada, 1870. Report, with appendices. 190 p. Supplementary return, 9 p. Sess. pa. 54. Royal Commission on the Arrangements *re* the Finances Advanced for the Contruction of a Railway to the Pacific: Report (in Journals of the House of Commons, Appendix 1, 1873), 227p. Royal Commission for Investigating the Books, Accounts and Vouchers of the Northern Railway Company of Canada, 1877. Report with evidence. Sess. pa. 10. Report of the Canadian Pacific Railway Royal Commission, 1882, Ottawa, S. Stephenson and Co. 3 v., V. 1 and 2 Evidence, V. 3 Conclusions. Royal Commission on Chinese Immigration, 1884. Royal Commission on Railways: Report with appendices, 1888, 41 p. Royal Commission on the Leasing of Water Power, Lachine Canal, 1888. Sess. pa. 30 *(not printed).* Royal Commission to Inquire into Losses in the North-West Territories during the Rebellion, 1888. Sess. pa. 40 *(not printed).* Royal Commission on the Relations of Capital and Labor in Canada: Evidence, Quebec, Ontario, Nova Scotia, New Brunswick, 1889, 4 v. Royal Commission Appointed to Inquire into Certain Matters Relating to the Civil Service of Canada, 1892, 733p. Royal Commission in Reference to Certain Charges made against Hon. Sir P. A. Caron: Report, 1893, 602 p. Royal Commission on the Liquor Traffic in Canada: minutes of evidence, 1893-95. 5 v. in 6. Sess. pa. 21, V. 1. Report with app. and fold maps, 1,003 p., V. 2 Index of subjects. 171 p. Royal Commission on the Shipment and Transportation of Grain, 1900: Report, Sess. pa. 81A. Royal Commission on Chinese and Japanese Immigration, 1902: Report. Royal Commission *re* the Alleged Combination of Paper Manufacturers and Dealers, 1902. Report of Commissioners and Other Documents Connected with the Commission, 242 p. Sess. pa. 53. Royal Commission on Transportation, 1903: Report, 67 p. (Sup. to Report of Minister of Public Works). Royal Commission (on the) Tobacco Trade, 1903. Report 10p. Sess. pa. 62. Royal Commission on Industrial Disputes in the Province of British Columbia: Report and minutes of evidence, 2 pts., 1903-04. Royal Commission on the Alleged Employment of Aliens in Connection with the Surveys of the Proposed Grand Trunk Pacific Railway, 1905. Royal Commission Appointed to Inquire into the Immigration of Italian Labourers to Montreal and the Alleged Fraudulent Practices of Employment Agencies, 1905. *(Dept. of Labour)* 41+173 p. Sess. pa. 36b. Royal Commission *re* the Alleged Employment of Aliens by the Père Marquette Railway Company of Canada, 1905. Report of Commissioner *(issued by Dept. of Labour)* 2 v. in 1 (also Sess. pa. 36c and 36d) 36+121 p. Royal Commission on the Grain Trade of Canada. Sess. pa. 59, 1906. Royal Commission on Transportation.

---

* Revised by Miss Grace S. Lewis, Librarian, Dominion Bureau of Statistics.

Report (Sup. to An. Rept. Minister of Public Works, 1903) 1906, 63 p. Sess. pa. 19a. Royal Commission on a Dispute Respecting Hours of Employment Between the Bell Telephone Company of Canada, Ltd., and Operators at Toronto, Ont., 1907, 102 p. Royal Commission on (Life) Insurance: Evidence, 4 v.: Report, 1907, 204p. Royal Commission on the Civil Service, Report with minutes of evidence, 1908, 1,387 p. Royal Commission Quebec Bridge Inquiry: Report, 1908, 2 v. 206+p.: List of plans accompanying the report, 1-37. Royal Commission Appointed to Inquire into the Methods by which Oriental Labourers have been Induced to Come to Canada, 1908. Report, King's Printer, 81 p. Royal Commission to Inquire into Industrial Disputes in the Cotton Factories of Quebec: Report, 1909, 32 p. Royal Commission on Trade Relations between Canada and the West Indies. Report with minutes of evidence and appendices, 1911. Royal Commission on Alleged Chinese Frauds and Opium Smuggling on the Pacific Coast, 1910-11. Report with evidence and exhibits, 1911. Sess. pa. 207 *(not printed).* Royal Commission of Inquiry in the Matter of the Farmers Bank of Canada: Proceedings, 1913, 717 p. Royal Commission on Industrial Training and Technical Education: Commissioners' Report, 1913, 4 v. *($2).* Royal Commission on Coal Mining Disputes on Vancouver Island. Report issued by authority of the Minister of Labour, 1913. 43p. Royal Commission on the Law Respecting Pilotage and its Administration in the Pilotage Districts of Montreal and Quebec, 1913. Sess. pa. 191c. *(not printed).* Royal Commission to Inquire into Alleged Complaints Relating to Weighing of Butter and Cheese in Montreal, 1913. Report 17 p. Sess. pa. 153b. Royal Commission on Penitentiaries: Report, 1914, 44 p. *(10 cents).* Royal Commission Appointed to Inquire into the State of the Records of the Public Departments of the Dominion of Canada, 1914. Report, 16 p. Royal Commission Appointed to Investigate Construction of the National Transcontinental Railway, 1914. Report, with exhibits, 2 v. Sess. pa. 123. Royal Commission on the Loss of the British Steamship *Empress of Ireland* of Liverpool (0.123972) through Collision with the Norwegian Steamship *Storstad*, 1914. Report, with minutes of evidence, 615 p. Sess. pa. 21b. Royal Commission on Cost of Living, 1915. 2v. Royal Commission *re* Parliament Buildings' Fire at Ottawa, 1916 *(10 cents).* Royal Commission to Inquire into Railways and Transportation in Canada, 1917 (Drayton-Acworth Comm.) *(15 cents).* Royal Commission Appointed to Inquire into the Purchase by and on behalf of the Government of the Dominion of Canada of Arms, Munitions, Implements, Materials, Horses, Supplies, and Other Things for the Purpose of the Present War and as to the Expenditures and Payments Made or Agreed to be Made Therefor, 1917. Report of the Commissioner Concerning Purchase of Submarines. 25 p. Royal Commission Concerning Purchase of War Supplies and Sale of Small Arms Ammunition. Report of the Hon. Sir Charles Davidson, Kt., 1917. 3 pts. Pt. 1—Concerning Military Cloth (Auburn Woollen Mills Co.) 35 p. Pt. 2—Concerning Small Arms Ammunition, 56 p. Pt. 3—Evidence, 2,740 p. Royal Commission on Delivery of Cargoes of Coal to Coasting Vessels, etc. 1917. Report, Sess. pa. 142 *(not printed).* Royal Commission on Indian Affairs on the Kitsilano Indian Reserve, 1917. Report Sess. pa. 85 *(not printed).* Royal Commission on the High Cost of Living, 1917. Reports: *re* Sugar, 39 p. *re* Anthracite Coal, 34 p. *re* Cold Storage, 63 p. Sess. pa. 189, 190, and 210a. Royal Commission appointed to Inquire into and Report upon the Pilotage System and its Administration at the Port of Halifax, N.S. Report, 1918. Sess. pa. 99 *(not printed).* Royal Commission of Inquiry into the Ship-Yards Trouble in Vancouver: W. E. Burns, E. A. James, and James McVety, Commissioners (*Statement issued by Department of Labour*). Royal Commission of Inquiry into the Civic Strike in Winnipeg, 1919 *(Statement issued by Department of Labour).* Royal Commission on Industrial Relations 1919: Report together with a minority report, 26 p. *(20 cents).* Royal Commission on Conditions in the Pilotage Districts of Vancouver, Victoria, Nanaimo, and New Westminster, 1919. Report, 13 p. Sess. pa. 105. Royal Commission on the Pilotage Districts of Miramichi, Sydney, Louisburg, Halifax, Saint John, Montreal, and Quebec, 1919. Report, 27 p. Sess. pa. 104. Royal Commission on Racing Inquiry: Report, 1920 *(10 cents).* Royal Commission on Affairs of Indians in British Columbia, 1920. Report. Sess. pa. 66 *(not printed).* Royal Commission Appointed by Order-in-Council, May 20, 1919, to Investigate the Reindeer and Musk-ox Industries in the Arctic and Sub-Arctic Regions of Canada, 1922. Report, 99 p. Sess. pa. 162. Royal Commission on Lake Grain Rates: Report, 1923 *(10 cents).* Royal Commission on Pensions and Re-Establishment, 1923: First interim report, 1923 *(10 cents)*; Second interim report, 1924 *(25 cents)*; Final report, 1924 *($1).* Royal Commission on Pulpwood: Report, Ottawa, July, 1924, 298 p. *($1).* Royal Grain Inquiry Commission: Interim report, 1924, 32 p. Royal Commission Appointed to Inquire into the State of the Records of the Public Departments of the Dominion of Canada (in 1912) 1924. Report, 15 p. Royal Commission Regarding Industrial Unrest of Steel Workers at Sydney, N.S.: Report (Sup. to *Labour Gazette*, Feb., 1924) 1924, 24 p. Sess. pa. 39. Royal Commission to Inquire into and Report upon Affairs of the Home Bank of Canada and in the Matter of the Petition of the Depositors in the said Home Bank of Canada, 1924. Interim report, 26 p. Sess. pa. 100d. Hearing and evidence, 18 v. Reports 1-18 (except 2 and 4) 844 p. Royal Commission to Investigate Grand Trunk Railway Officials' Gratuities, 1924. Report and minutes of evidence. Sess. pa. 99 *(not printed).* Royal Grain Inquiry Commission: Report, 1924, 217 p. *($1).* Royal Commission on Maritime Claims: Report, 1926, 45 p. *(25 cents).* Royal Commission on Election in Athabaska, 1926-27. Sess. pa. 69 *(not printed).* Royal Commission Investigating the Fisheries of the Maritime Provinces and the Magdalen Islands, 1928, 125 p. *(50 cents).* Royal Commission on Customs and Excise: Interim reports 1-10, 119 p.: final report, 1928, 24 p. *(25 cents).* Royal Commission on Reconveyance of Land to British Columbia, 1928, 57 p. *(25 cents).* Royal Commission Appointed to Investigate Charges of Political Partisanship in the Department of Soldiers' Civil Re-establishment. Report, 1928, 31 p. Royal Commission on Illegal Warfare Claims and for Return of Sequestrated Property in Necessitous Cases, 1928. Report, 2 v. in 1. Index, 24 p. preliminary report *(in French)* 1931, 172 p., special report, 12 p. 1931, supplementary report, 38 p. 1932, further report. 217 p. 1933. Royal Commission Appointed to Inquire into Pilotage in British Columbia Waters, 1929, 10 p. *(10 cents).* Royal Commission on Radio Broadcasting: Report (Aird Comm.), 1929, 59 p. *(25 cents).* Royal Commission on the Transfer of the Natural Resources of Manitoba: Report, 1929, 46 p. *(25 cents).* Royal Commission on Technical and Professional Services: Report (Beatty Comm.) 1930, 60 p. *(15 cents).* Royal Commission to Inquire into Trading in Grain Futures: Report (Stamp Comm.), 1931, 90 p., chart *(25 cents).* Royal Commission to Inquire into Railways and Transportation in Canada, 1931-32 (Duff Comm.), 115 p., maps, chart *(75 cents).* Royal Commission on Banking and Currency in Canada, 1933 (Macmillan Report), 119 p. *(50 cents).* Royal Commission on Price Spreads, 1935: Report (Stevens Comm.), 30+506 p. *($2).* Royal Commission on the Natural Resources of Alberta, 1935, 42 p. *(25 cents).* Royal Commission on the Natural Resources of Saskatchewan, 1935, 68 p. *(25 cents).* Royal Commission on Financial Arrangements Between the Dominion and the Maritime Provinces, 1935: Report (White Comm.), 24 p. *(10 cents).* Royal Commission on Activities of the Canadian Performing Rights Society, Limited, and Similar Societies, 1935: Report, 49+p. Royal Commission on Anthracite Coal Report, 1937, 120 p. *(25 cents).* Royal Commission on the Textile Industry Report, 1938, 308 p. *(English and French editions), (75 cents).* Royal Grain Inquiry Commission Report, 1938, 264 p. *($1).* Royal Commission to Investigate the Penal System of Canada, 1938: Report, 6+418 p. *($1).* Royal Commission on the Bren Machine Gun Contract, 1939: Report 52 p. *(25 cents).* Royal Commission on Dominion-Provincial Relations *(a check-list of briefs submitted by provincial and municipal governments and other Canadian organizations, available in the Library of the Royal Bank of Canada, 1939, 4 p. rotopr.)*

PROVINCIAL ROYAL COMMISSIONS.

NOTE.—*In many instances it is not possible to say whether the date given applies to the date of the appointment of the Royal Commission or to the date of the Report, but where possible the date of the Report is the one shown.*

Prince Edward Island.—Copy of an Address to Her Majesty Adopted by the House of Assembly of Prince Edward's Island on the 9th day of May, 1859, *re* Appointment of a Commission to Inquire into the Existing Relations of Landlord and Tenant in that Colony:—and copy of extracts of the subsequent correspondence of the Secretary of State for the Colonies with the Governor of Prince Edward's Island and landowners and others of that Colony, relating to the same subject, 1864, 147 p. (528) V. 41. Correspondence relative to the land tenure question in Prince Edward Island, 1875, 84 p.—C. 1351— V. 53. Commission for Carrying out the Purpose of the Land Purchase Act of 1875, Report, 1876, 46 p.—C. 1487—V. 53. Report of the Royal Commission on Education, 1930, 55 p. H. F. McPhee. Brief for the Province of Prince Edward Island for Readjustment of Financial Arrangements with the Dominion Government and Full Implementation of the Report of the Royal Commission on Maritime Claims, August, 1934, 30 p. The Case of Prince Edward Island: Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of Prince Edward Island, Charlottetown, Irwin Pr. Co., 1938, 4+66 p.

Nova Scotia.—Report of Commission appointed under C. 10, Acts 1907, Entitled "An Act Respecting Old Age Pensions and Miners' Relief Societies", 1908. Report of the Shipbuilding (Royal) Commission, 1918, 16 p. Royal Commission *re* Expenditures in Connection with the Construction of Certain Federal Aid Roads by the Provincial Highway Board: Report, 1921, 20 p. Report of the Royal Commission Respecting the Coal Mines of the Province, 1925, 59 p., chart. Report of Provincial Royal Commission on Coal Mining Industry in Nova Scotia, 1926, 31 p. Province of Nova Scotia: a Submission of Its Claims with Respect to Maritime Disabilities Within Confederation as Presented to the Royal Commission, Halifax, N.S., July 21, 1926, 178+4 p. Royal Commission on Ratings of the Lunenburg Fishing Fleet and Lumber Industries as Applied by the Workmen's Compensation Board, Nova Scotia: Report and findings, 42 p., 1927. Royal Commission on the Mentally Deficient Persons in Nova Scotia, 1927: Report, 4 p., 1928. Report of the Royal Commission Investigating the Apple Industry of the Province of Nova Scotia, 1930, 71 p. Report of the Royal Commission Respecting the Coal Mines of Nova Scotia, 1932, 32 p., charts. Report of the Royal Commission Concerning Jails, 1933, 115 p. Royal Commission of Economic Inquiry: a Submission on Dominion-Provincial Relations and the Fiscal Disabilities of Nova Scotia Within the Canadian Federation, 1934, 263 p.: Report, 238 p., bibl., appendices, 133 p. The Jones Report on Nova Scotia's Economic Welfare within Confederation. A digest prepared by the Government of Nova Scotia, 1934. 27 p. (Royal Commission of) Inquiry, Nova Scotia Franchise: Report, 1934, 92 p. Report of Royal Commission on Distribution and Consumption of Milk and Cream in Halifax, 1935, 24 p. Report of the Royal Commission on Transportation, 1936, 21 p. Royal Commission on Workmen's Compensation, 1937, 21 p. Submission on Behalf of the Union of Nova Scotia Municipalities, to the Royal Commission on Dominion-Provincial Relations, 1938, 37 p. Submission by the Government of the Province of Nova Scotia to the Royal Commission on Dominion-Provincial Relations, 1938, 141 p., appendices, 22 p. Submission by the City of Halifax to the Royal Commission on Dominion Provincial-Relations, 1938, 42p. Report of Royal Commission *re* Acadia Coal Company, 1938 *(to be printed).*

New Brunswick.—Royal Commission, issued under Act of Assembly 5 Edward VII, c. 20, entitled "An Act to Investigate Certain Charges Made against the Restigouche Boom Company". Report,1906. Royal Commission Concerning St. John and Quebec Railway Company Charges: Report (N.B. pa. sup. appx., p. 116-147, 1915). Report of the Royal Commission in Respect to the Lumber Industry, 1927, 15 p. Report of the Royal Commission to Investigate Working of Compensation Act in Respect to Lumber Industry, 1927, 10 p. Royal Commission to Inquire into the Taxation by Cities, Towns, and Municipalities, of Non-residents, 1928, 28 p. The Harrison Special Brief for New Brunswick, for Readjustments of Financial Arrangements with Dominion Government, and Further Implementation of the Recommendations of the Royal Commission on Maritime Claims, 1934, 27 p.

Quebec.—Royal Commission Appointed to Hold an Investigation into the Administrative Details of the Constitution, Working, and Sale of the Quebec, Montreal, Ottawa and Occidental Railway, as well as the Final Settlement of Accounts and Other Facts Relating to the Railway, 1885 (Dom. an. reg., 1885, p. 182). Royal Commission on Lunatic Asylums of the Province of Quebec: Report, 1888, 182 p. Royal Commission of Inquiry into the Baie des Chaleurs Railway Matter. Proceedings of the Commission and depositions of witnesses, 1,071 p. 1891. Reports, proceedings of the Commission and depositions of witnesses, appendices and indices, 1892, 192 p. Royal Commission to Make Inquiry into Different Matters and Things Concerning the Good Government of (the) Province. Minutes of proceedings and evidence of witnesses, 1892, 269 p.

Ontario.—Royal Commission on Certain Charges Against the Warden of the Central Prison: Report and Evidence of Wardens of Prisons in the United States and Canada, 1883, 181+63 p. Report of the Royal Commission on the Mineral Resources of Ontario and Measures for their Development, 1890. Report of the Royal Commission on Forest Reservation and National Park, and Papers and Reports upon Forestry, Forest Schools . . . 1893. Return of Royal Commissions since Confederation, together with the dates, subjects, etc., 1894, 7 p. Royal Commission on Forestry Protection in Ontario, 1899. Report, 29 p. fold. map. Sess. pa. 35, 1900. Royal Commission on the Financial Position of the Province of Ontario: Report, 1901, 29p. Report of the Royal Commission on the Gamey Charges, Toronto, 1903, 952+98+48 p. Royal Commission on Railway Taxation: Report, 1905 (Can. an. rev., 1905, p. 291-3; 1906, p. 343). Royal Commission on the University of Toronto: Report, 1906, 60+268 p. In the Matter of a Royal Commission to Inquire into the Administration, Management, and Welfare of the Ontario School for the Blind: Report and recommendations, 1917, 35 p. Royal Ontario Nickel Commission: Report and appendix, 1917. Royal Commission on University Finances: Report, 1921, 160 p. Royal Commission on the Best Mode of Selecting, Appointing, and Remunerating Police Magistrates. Interim report, respecting Sheriffs, 37 p. tables. Interim report, respecting Issuers of Marriage Licences, 7 p. 1921, Sess. pa. 62, 1921. Interim report, respecting Police Magistrates, 21 p. Interim report, respecting Coroners, 10 p. Sess. pa. 63 and 80, 1921. Interim report, respecting Toronto Police Court, 28 p. Interim report, respecting Toronto and York Registry Offices, 6 p., 1921. Interim report respecting Extension of Land Titles System in Northern Ontario, 6 p. Interim report respecting Osgoode Hall, 1 p. 5+28 p., tables, 1922. Royal Commission on Hydro-Electric Power Commission to "inquire into and report upon all estimates submitted from time to time to the Hydro-Electric Power Commission of Ontario for the Chippewa Power Development and also all estimates for the said work submitted by the said Commission to the Government of Ontario", etc., Report. 1924, Sess. pa. 62 *(not printed).* Royal Commission on Automobile Insurance Premium Rates: Interim Report on Compulsory Insurance and Safety Responsibility Laws, 1930, 85 p. Royal Commission on Public Welfare: Report, 1930, 111 p. Royal Commission to Investigate the Advisability of Amending the Workmen's Compensation Act (Can. an. rev., 1930-31 p. 143.) Sess. pa. 37, 1932. Royal Commission Appointed to Inquire into Certain Matters Concerning the Hydro-Electric Power Commission of Ontario: Report, 1932, 11 p. Royal Commission on the Use of Radium and X-rays in the Treatment of the Sick, 1932, 171 p. Royal Commission of Inquiry into "the circumstances surrounding the arrest and sentencing to five years in the Kingston Penitentiary of Albert Dorland in April, 1930, for carrying offensive weapons in the course of an alleged attempt to hold up the Royal Bank of Canada Branch at Church and Wellesley Streets, Toronto", Aug. 2, 1933 *(not printed).* Royal Commission of Inquiry into Alleged Cruelty and Unsatisfactory Management at the Children's Shelter at Windsor, Ontario, 1933-34, (Can. an. rev., 1934, p. 173-4). Royal Commission to Inquire into the Conduct, Management and Administration of the Children's Aid Society of York County: Report presented 1934 (Can. an. rev., 1934, p. 173-4). Royal Commission to Inquire into the Purchase by the Henry Government, in March, 1933, of the subsidiary company of the Abitibi Power and Paper Company and the Ownership at the time of some of the Company's Bonds both by the Hon. George S. Henry and the Rt. Hon. Arthur Meighen . . . July 12, 1934, (Can. an. rev., 1934, p. 188), *(not printed).*

Royal Commission to Investigate Charges Against Certain Members of the Toronto Police Force, 1935-36. The Government of Ontario, Statement to the Royal Commission on Dominion-Provincial Relations, 1938. Book 1, Prime Minister's Statement, 30 p. Book 2, General Statement, 80 p. Book 3, Appendix and tables, 22+34 p. Report of the Royal Commission on Transportation, Province of Ontario, 1938, 293 p.

Manitoba.—Royal Commission on the Financial Affairs of the Province: Report (Man. pa. 21, p. 389-538, 1900). Agricultural College Commission, 1902. Report (Man. pa. 1903, p. 491-502). Beef Commission to Inquire into the Purchase and Sale of Cattle, Hogs, Sheep, and Meat in the Provinces of Manitoba and Alberta. Report (Man. pa. 1908, p. 369-402). Royal Commission upon the University of Manitoba: Report (Man. pa. p. 397-492, 1910). Royal Commission on the Compensation to be Allowed to Workmen for Accidental Injuries Received in the Course of their Business (Sess. pa. 24, 1910, 21 p.). Royal Commission on Technical Education and Industrial Training: Report (Man. pa. p. 281-356, 1912). Royal Commission to Examine and Inquire into all Matters Relating to the Manitoba Telephone System. Interim report. (Sess. pa. 19, 1912, 2 p.). Royal Commission to Investigate and Inquire into and Report upon the Escape of One John Krafcherko from the Custody of the Police Officers of the City of Winnipeg (Sess. pa. 16, 1913-14.) *(not printed)*. Royal Commission Appointed to Investigate the Charges Made in the Statement of C. P. Fullerton, K.C.: Report, 1915, 17 p. Royal Commission on the New Parliament Buildings: Report, 1916, 85 p. Special Commission on the Gaol and Prison Farm of the Eastern Judicial District of Manitoba. Report (Man. pa. 21, p. 1125-57, 1916). Royal Commission on all Expenditure for Road Work during the Year 1914: Report, 1917, 60 p. Royal Commission on all Matters Pertaining to the Manitoba Agricultural College: Interim report (Man. pa. 17, p. 1161-1205, 1917). Royal Commission on all Expenditures for Road Work during the year 1914; Report, 1917, 62 p. Fallis Commission on Workmen's Compensation, 1918, *(not printed)*. Commission on Status and Salaries of Teachers, 1919, 24 p. Public Welfare Commission. First interim report *(not printed)* Second interim report, 1919, 154 p. Third and final report, 1920, 51 p. Royal Commission on the Winnipeg General Strike, 1919, 31 p. Drainage Commission, 1921, 24 p. Commission on "The Rural Credits Act", 1923, 22 p. Royal Commission on Education: Interim report, 62 p. Reports on the College of Agriculture and the University of Manitoba Submitted by the Royal Commission and the Carnegie Foundation for the Advancement of Teaching, 1924, 149 p. Royal Commission on the Better Adaptation of the Elementary and Secondary Schools to the Needs of the Communities which they Serve, 1926. Interim report of the committee on the review of the program of studies *(Printed by Dept. of Education)* 61 p. Royal Commission Appointed to Inquire into the Administration of the Child Welfare Division of the Department of Health and Public Welfare, 1929, 54 p., chart. Royal Commission *re* Allegations as to the Seven Sisters Falls Power Site Agreement, 1929 (Pub. in Man. Free Press, May 1 and 7, 1929). Royal Commission to Inquire into the Administration of the Child Welfare Division of the Department of Health and Public Welfare, 1929, 57 p. chart. Royal Commission Regarding the Blind in Manitoba and Saskatchewan (tabled in the Legislature Mar. 6, 1931), 45 p. Royal Commission on Manitoba Pool Elevators: Report, 1931 (Can. an. rev., 1930-31, p. 235-36). Royal Commission Appointed to Inquire into the (misappropriation) of funds belonging to the University of Manitoba and to Heber Archibald . . . , 1932. Royal Commission on Impairment of University of Manitoba Trust Funds, 1932-33, (Sess. pa. 50, 1932-33). Commission to Investigate the Fishing Industry in Manitoba, 1934. Pt. I, 1933, 30 p., chart. Pt. II, 1934. Report under the Fair Trade Practices Act Regarding Bread in Greater Winnipeg, 1936, 51 p. Commission on Land Drainage Arrangement, 1936, 67 p. chart. Manitoba's Case: A submission presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of Manitoba, 1937: 9 parts—(1) Introduction, 6 p.; (2) The constitutional relations of the Dominion and the provinces, 43 p.; (3) The effects of federal monetary policy on western Canadian economy, 47 p.; (4) The effects of federal tariff policy on Western Canadian economy, 40 p.; (5) The effects of declining income, 32 p.; (6) The financial problems of municipalities and school districts, 26 p.; (7) Analysis of Manitoba's treasury problem, 96 p.; (8) Manitoba's case: summary and recommendations, 58 p.; (9) An examination of certain proposals for the readjustment of Dominion-Provincial financial relations, 29 p.

Saskatchewan.—Royal Commission *re* Grain Growers' Association, 1910. Royal Commission of Inquiry into Agricultural Credit, 1913: Report, 32 p. Royal Commission on Grain Trade on the European Markets, 1913. Royal Commission Concerning Common Gaol at Prince Albert, 1913. Royal Commission *re* Sale of Farm Machinery and Requisites of the Farm, 1914. Royal Commission *re* Live Stock Industry in S. West of Province, 1914. Royal Commission on Grain Markets, 1914: Report, 150+3 p. 2 fold. diags. Royal Commission on Battleford Asylum, 1914. Royal Commission *re* Marketing of Live Stock and Live Stock Products, 1915. Royal Commission on the Sale of Farm Machinery, 1914: Report (typ.) 41 p. Minutes of evidence, 19 V. (Sess. pa. 23, 1915). Royal Commission on the System of Liquor Dispensaries in South Carolina under State Control: Original report only (typ.) 95 p. (Sess. pa. 5, 1915) *(not printed)*. Bribery and Liquor Commission, 1916, (Can. an. rev., 1916, p. 705) *(not printed)*. Highway Frauds Commission, 1916. Royal Commission to Inquire into Public Matters *re* R. J. Lecky Construction Co., 1916. McGuire-

Parker (Royal) Commission *re* Executive Council Meeting under "New Rural Credit Act", 1916. Buildings and Telephone Commission, 1916-17. Royal Commission *re* Farming Industry in Western and S. West of Province, 1920. Royal Commission to Inquire into Equalization of Assessments in Municipalities—Urban and Rural, 1921. Royal Commission of Inquiry into Farming Conditions, 1921: Report, 70 p., fold. map. Royal Commission to Inquire into Tuberculosis in Saskatchewan, 1921. Commission of Inquiry Respecting the Public Revenues Tax. Synopsis of report, 13 p. (Sess. pa. 19, 1921-22). Royal Commission *re* Regina Gaol, 1924. Royal Commission *re* Wolseley Home for Infirm, 1925. (Royal) Power Resources Commission, 1927. Royal Grain Inquiry Commission: Reports, 1928, 157 p. Royal Commission *re* Labour Conditions, 1928. Bryant (Royal) Commission in Regard to Conduct of the Civil Service of this Province, 1929. Royal Commission *re* Mental Hygiene, 1929. Royal Commission Appointed to Inquire into Workmen's Compensation for Saskatchewan, 1929. Saskatchewan Royal Commission on Immigration and Settlement: Report, 1930, 206 p. Royal Commission *re* Inquiry into Disposition of Property under the United Church of Canada Act: Original report (typ.) 31 p. Evidence (minutes of) (Sess. pa. 46, 1930). Royal Commission *re* Welfare of the Blind, 1930. Royal Commission *re* Public Works and Member for Prince Albert, 1930. Royal Commission of Inquiry *re* Liquor Board, etc., 1930. Royal Commission in regard to Drought Conditions in Province, 1931. Royal Commission *re* Relieving Distress and Providing Employment, 1931. Royal Commission *re* Estevan Coal Fields: Dispute between Miners and Mine Owners, 1931. Royal Commission to Inquire into Statement Made in Statutory Declarations and Other Matters *re* Bryant Charges, 1931: Report, 180 p., Return *re* witnesses before commission *re* Bryant charges (typ.), [Sess. pa. 88 (report) and 70 (return), 1931]. Corrigenda to report (Sess. pa. 4, 1932). Royal Commission *re* Bank Act, 1932. Royal Commission Appointed to Investigate into Mining Conditions in the Province of Saskatchewan, 1932. Royal Milk Inquiry Commission: Report, 1933, (mimeo), 42 p. Royal Commission *re* Coal Mining Industry in Saskatchewan, 1934. Royal Commission *re* Regina Riot—To Investigate and Report *re* Announced Trek to Ottawa of So-called Relief Camp Strikers, 1935. Royal Commission of Inquiry into Provincial and Municipal Taxation: Report with tables, 1936, 196 p. Royal Commission *re* Standardization of Legal Forms (Martin), 1937. Submission by the Government of Saskatchewan to the Royal Commission on Dominion-Provincial Relations, 1937, 4+434 p.

Alberta.—Royal Commission *re* Calgary Natural Gas Company, 1919. Royal Commission *re* Joe Cameron and Reward Offered for Capture of, 1919. Royal Commission *re* Coal Mining Industry, 1919. Royal Commission *re* Conditions in Southern Alberta (Drought Area), 1921. Royal Commission *re* Banking Conditions, 1922. Royal Commission *re* Natural Gas, 1922. Royal Commission *re* the Handling and Marketing of Grain in Canada, 1923. Royal Commission *re* Coal Mining Industry, 1924. Royal Commission *re* Ponoka Hospital Sewage System, 1924. Royal Commission *re* Hanna Hospital, 1925. Royal Commission *re* Lethbridge Gaol, 1925. Royal Commission *re* Manville Hospital, 1925. Royal Commission *re* King's Printer's Office, 1925. Royal Commission *re* District between Red Deer and South Saskatchewan Rivers, East of Range 10, 1926. Royal Commission *re* Church Properties (Presbyterian Church, United Church), 1926. Royal Commission *re* Factories Act—Establishment of Forty-eight-hour Working Week, 1926. Royal Commission *re* Mine Disaster—McGillivray Creek Coal and Coke Company, Ltd., Coleman, 1927. Royal Commission *re* Innisfail Hospital, 1927. Royal Commission *re* Coronation Hospital, 1927. Royal Commission *re* Innisfail Hospital, 1928. Royal Commission *re* Provincial Mental Hospitals, 1928. Royal Commission *re* Saskatchewan Grain Inquiry, 1929. Royal Commission *re* Cost of Funerals, 1930. Royal Commission *re* Trade Schools, 1931. Royal Commission *re* Municipal District of Inga No. 520, 1931. Royal Commission *re* Alberta Provincial Police Pension Fund, 1932. Royal Commission *re* O. B. Lassiter and Henry Wise Wood, Jr., and Administration of Justice, 1934. Royal Commission *re* Half-breed Population, 1934. Royal Commission *re* Coal Industry, 1935. Royal Commission *re* Imperial Mine Disaster, 1936. Royal Commission *re* Irrigation Development in Alberta, 1936. Royal Commission *re* Hours of Work of Turner Valley Oil Well Workers, 1937. Royal Commission *re* Hours of Work and Conditions of Labour of Employees in Meat Packing and Laundry Industries—Edmonton, 1937. Royal Commission *re* Conditions and Practices Prevailing in the Fluid Milk and Cream Industry, 1937. Royal Commission *re* Edmonton-Wetaskiwin and Edmonton-Jasper Highways, 1937. Royal Commission *re* Affairs of the Town of Beverly, 1937. Royal Commission *re* Production, Refining, Transportation, and Marketing of Petroleum and Petroleum Products in Alberta, and the Cost and Prices thereof, 1938.

British Columbia.—Royal Commission for Instituting Inquiries into the Acquisition of Texada Island: Papers (B.C. pa., p. 181-246, 1875). Kootenay Royal Commission: Proceedings (B.C. pa., p. 141-156, 1879), 1880. Royal Commission concerning the Genuineness of an Alleged Transfer, Dated the 23rd day of June, 1884, from certain Indians to one J. M. M. Spinks, Report, 1885, 22 p. Royal Commission on the Conduct of the Affairs of the Municipal Council of Victoria: Report (B.C. pa., p. 481-512, i-cxli, 1892). Royal Commission *re* Smallpox Matters, 1892. Report, 11 p. Royal Commission on the Management of the Provincial Lunatic Asylum at New Westminster: Report (B.C. pa., p. 503-574, 1894). Royal Commission on Charges Preferred against Captain N. Fitzstubbs. Report, 1894, 2 p. Royal

Commission of Inquiry on Timber and Forestry: Final report, 1909-10. Royal Commission on Municipal Government, 1912: Report, 18 p., 1913. Royal Commission on Taxation: Synopsis of report and full report, 1912, 38 p. Royal Commission on Agriculture, 1912, full report, 9+398 p., 1914. Royal Commission on Matters Relating to the Sect of Doukhobors in the Province: Report, 1913, 66 p. Royal Commission on Milk Supply: Report, 1913, 29 p. Royal Commission on Agriculture: Report, 1914, 9+42 p.: Full report, 1914, 9+398 p. Royal Commission *re* Coal in British Columbia, 1914. Report, 30 p. Royal Commission on Labour: Report, 1914, 28 p. Royal Commission *re* Albert Richard Baker, Chairman of Game Conservation Board. Report, 1922, 5 p. Royal Commission on the Pacific Great Eastern Railway. Report, 1924, 21 p. Royal Commission on Mental Hygiene: Report and final report, 2 pts., 1927-28. Royal Commission Investigating the Fruit Industry (and Interrelated Conditions) of the Districts Territorially Known as the Okanagan, Kootenay, and Kettle River of the Province of British Columbia. Report, Part I, 1930, 23 p. Part II, 1931, 29 p. Royal Commission on State Health Insurance and Maternity Benefits. Progress report, 1930, 30 p., Final report, 1932, 63 p. Royal Commission on Chiropractic and Drugless Healing Report, 1932, 11 p. Municipal Taxation Commission Report, 4+90 p., (mimeo), 1933. British Columbia in the Canadian Confederation: Brief presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of British Columbia, 37 p., 1938: Submission Presented to the Royal Commission on Dominion-Provincial Relations by the Government of the Province of British Columbia, 376 p., 1938.

BRITISH ROYAL COMMISSIONS CONCERNED WITH CANADA.

Royal Commission on Crofter Colonization, 1888. Reports of H. M. Commissioners: 15 reports, 1890, 1890-91, 1892, 1893-94, 1894, 1895, 1896, 1897, 1899, 1900, 1901, 1902, 1903, 1904, 1906. Royal Commission on the Natural Resources, Trade and Legislation of Certain Portions of H. M. Dominions, 1912: Reports and minutes of evidence, 1st interim report, 1912, 3 p.; 5th interim report (Canada), 1917, 6+61 p.; final report, 1917, 9+199 p.—minutes of evidence, pt. 1, Migration, 1918, 293 p., pt. 2, Natural Resources, Trade, 1912, 3+432 p.: Minutes of evidence taken in Maritime Canada in 1914, 1915, 5+191 p.: Minutes of evidence taken in Central and Western Canada in 1916, pt. 1, 1917, 12+464 p.; pt. 2, 1917, 7+462 p.

CHAPTER XXX.—THE ANNUAL REGISTER, 1938-39.

Section 1.—Dominion Legislation, 1938.

Legislation of the Third Session, Eighteenth Parliament, Jan. 27, 1938, to July 1, 1938.

Finance and Taxation.—Four Appropriation Acts were passed during the session, *viz.*, cc. 1, 2, 18, and 54; c. 2 applied to the fiscal year ended Mar. 31, 1938, and cc. 1, 18, and 54 to the fiscal year ended Mar. 31, 1939. C. 1, the Appropriation Act, No. 1, 1938, granted a sum not exceeding $39,057,624·49 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted, set forth in the Main Estimates. C. 2, the Appropriation Act, No.2, 1938, granted a sum not exceeding $36,717,668·24 towards defraying the several charges and expenses of the public service, set forth in the Schedule to this Act. By c. 18, the Appropriation Act, No. 3, 1938, were granted: $39,057,624·49 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted, set forth in the Main Estimates; $17,751,572·68 towards defraying the several charges and expenses of the public service, being one-sixth of the amount of each of the several items to be voted, set forth in the Supplementary Estimates. By c. 54, the Appropriation Act, No. 4, 1938, were granted: $156,230,497·94 towards defraying the several charges and expenses of the public service, being two-thirds of the amount of each of the items to be voted, set forth in Schedule A to this Act; $88,757,863·42 towards defraying the several charges and expenses to the public service, being five-sixths of the amount of each of the several items to be voted, set forth in Schedule B to this Act. Under s. 4 of this chapter, the Governor in Council is empowered to raise a loan not in excess of $200,000,000 for public works and general purposes, the principal and interest being chargeable to the Consolidated Revenue Fund. All borrowing powers outstanding under Appropriation Act, No. 3, 1937 (c. 45, 1937), expire on the coming into force of this legislation.

By c. 33, the Municipal Improvements Assistance Act, the Minister of Finance may, with the approval of the Governor in Council subject to the provisions of this Act, enter into an agreement with any municipality to make a loan or loans, under certain conditions laid down in s. 3 and on security, for the purpose of meeting the whole or part of the cost of constructing, or making extensions or improvements to, or renewals of any self-liquidating municipal project. The aggregate principal amount of such loans shall not exceed $30,000,000 and the aggregate amount loaned to any one municipality shall not exceed that proportion of $30,000,000 which the population of the municipality bears to the total population of Canada. Interest on such loans shall be charged at 2 p.c. per annum and principal shall be amortized by semi-annual payments over a period which shall not be longer than the useful life of the project.

National Revenue.—Under c. 29, which amends the Excise Act (c. 52 of the Statues of 1934) legislation dealing with licences to carry on the trade or business of rectifying spirits, to import, make, or sell apparatus for the manufacture of spirits, and to import, manufacture, possess, or use chemical stills, is amended in several respects, the chief of which follow. The sections under Part II of the original legislation dealing with licences to rectifyers and to importers of apparatus are repealed. Conditions of granting other licences under this Part are also modified, especially as regards the conditions of licence for chemical stills. In respect to abatement of spirits warehoused, two additional provisos are added, *viz.*, an abatement not exceeding 2 p.c. may be allowed on deficiencies found in distillery stocks and an abatement not exceeding 3 p.c. of the quantity originally warehoused in wooden barrels may be allowed for wood absorption. Spirits manufactured from native wines, when such spirits are used for fortification purposes, are excluded with gin from spirits which must be warehoused for two years before they may be entered for consumption. With regard to tobacco and cigars, sections of the Act dealing with duties levied on raw leaf imported into Canada are repealed, together with sections dealing with the completion of manufacture of tobacco and cigars, the monthly returns of completed manufacture, and the minimum of cigars to be produced from a stated amount of raw material; the quantities of raw-leaf tobacco, cigars, and cigarettes that may be warehoused or ex-warehoused by a single entry as outlined in s. 267 of the original legislation are modified. The sections of the original legislation relating to foreign raw-leaf tobacco are repealed and the penalties for unlawful removal, sale, or possession of tobacco or cigars are modified.

C. 48 amends the Income War Tax Act (c. 97, R.S.C. 1927). Small loan companies are excluded from the definition of non-resident-owned investment corporations. Taxable income, as defined by Part I of the original legislation, now includes annuities or other annual payments received under the provisions of any will or trust. Subject to certain provisions, dividends received from wholly-owned subsidiary non-resident companies are exempt from tax, also any lump sum payments made by an employer to an employees' superannuation or pension fund. No deductions are to be allowed for royalties paid by non-residents of Canada out of royalties received from Canadian sources. By s. 32A, persons or corporations resident in Canada transacting with persons or corporations resident outside Canada for the purpose of avoiding or reducing liability to taxation shall continue to be liable to such taxation; and by s. 32B any assets distributed by a company to its shareholders without sale or at reduced price shall also be liable to taxation at fair market value to be determined by the Minister. The schedule of rates to be paid on gifts or donations has been revised, ranging now from 5 p.c. on gifts up to and including $25,000 to 15 p.c. on $1,000,000. Exemption is provided for gifts or donations, the value of which does not exceed one-half the difference between the income of the taxpayer in the previous year and the income tax payable thereon. The sections dealing with annuities and royalties are applicable to income of 1937 and subsequent periods, those dealing with exemptions and gifts to the income and gifts of 1938 and following, while s. 7 (introducing ss. 32A and 32B) concerning transactions reducing liability to taxation is applicable to income of 1936 and following years.

The Special War Revenue Act (c. 179, R.S.C. 1927 and amendments) is further amended by c. 52 of the Statutes of 1938. The excise tax on change of ownership of shares having a value of exactly one dollar each is raised to $\frac{1}{4}$ cent per share in place of $\frac{1}{10}$th of 1 p.c. of the value. In calculating sales tax, the definition of 'sale price' is amended to include charges for advertising, financing, servicing, and similar charges contracted for at the time of the sale. Conditions regarding penalties are revised and Schedules II and III enacted by the 1936 amendment Act (c. 45, 1936), are replaced by Schedules I and II, respectively, of this legislation.

Bank of Canada.—The Bank of Canada Act (c. 43 of the Statutes of 1934, as amended by c. 22, 1936) is further amended by c. 42. The capital of the Bank is reduced from $10,100,000 to $5,000,000, divided into 100,000 shares of the par value of $50 each, issued to the Minister of Finance and to be exchanged for the 102,000 Class "B" shares which were issued to him under the legislation of 1936 and held by him on behalf of the Dominion of Canada. Such Class "B" shares are to be turned over to the Bank of Canada for cancellation. Holders of Class "A" shares (which were issued to the public under previous legislation) shall receive from the Bank of Canada the sum of $59·20 for each share, together with the amount of dividends accrued to the date of the coming into force of this legislation, and all such shares shall be cancelled. By s. 3, the Board of Directors shall consist of a Governor, a Deputy Governor and eleven directors. Due to the changes in the constitution and ownership, adjustments in the method of appointing directors, and in other directions, are made.

Agriculture.—C. 5 amends the Canada Grain Act (c. 5 of the Statutes of 1930, as amended in 1932-33 and 1934) with respect to the binning of western wheat in licensed semi-public or private terminal elevators. That part of Schedule 1 of the 1930 legislation dealing with Red Spring Wheat and Canadian Western Garnet is repealed and the Schedule to this Act which includes "Garnet" grades as well as "Manitoba Northern", is substituted therefor.

Subject to the provisions of c. 13, the Seed Grain Loans Guarantee Act, 1938, the Governor in Council may authorize the guarantee of the principal and interest of loans made by any chartered bank for purchasing seed grain and providing other assistance to farmers in connection with seeding operations during the spring of 1938 and guaranteed by the provinces of Alberta and Saskatchewan, respectively, under the Agricultural Relief Advances Act of Alberta; or the Municipalities Seed Grain and Supply Act, 1938, the Local Improvement Districts Act, 1936, or the Local Improvement Districts Relief Act, all of Saskatchewan. The liability of the Dominion Government in respect of principal under all such guarantees shall not exceed $1,900,000 for Alberta loans and $14,500,000 for Saskatchewan. The form and terms of such guarantees must be approved by the Governor in Council.

C. 45 makes a minor amendment to the Dairy Industry Act.

C. 47 further amends the Farmers' Creditors Arrangement Act, 1934, as amended in 1935. The definition of 'creditor' is extended to cover a creditor who, notwithstanding the absence of privity of contract, holds a pledge or a lien against the property of the debtor. Provision is made for a proposal filed but not dealt with, or a proposal formulated or confirmed by a Board of Review, prior to the coming into force of this Act to be proceeded with, or confirmed by such Board of Review, or to be binding, provided the title to the land or chattels concerned has not been extinguished prior to the coming into force of this Act. The Court may grant to the estate of a deceased farmer, whose death has occurred on or after July 3, 1934, the right to file a proposal or continue proceedings under a proposal filed before the death of the farmer. By s. 5 an addition is made to s. 10 of the original legislation whereby the Court may annul a composition in case of default in carrying out any of the terms, and the farmer shall then be deemed to have committed an act of bankruptcy and Part I of the Bankruptcy Act shall, notwithstanding s. 7 thereof, apply. Where a proposal has been filed, the stay of proceedings is effective until the date of the final disposition of the proposal. It is further provided that no new proposal shall be filed in a province after a date to be fixed by a proclamation respecting such province. The latest date for the filing of a proposal in Manitoba and British Columbia is June 30, 1939, and in every other province, but Saskatchewan and Alberta, Dec. 31, 1938, exception being made as to soldier settlers.

The definitions of 'control sample' and 'official sample', as set forth in the Seeds Act, 1937, are revised in minor detail by c. 51.

Civil Service.—The Civil Service Act (c. 22, R.S.C. 1927) is amended by c. 7. A proviso is added to the requirement that all appointments to the Civil Service shall be upon competitive examination, it being stipulated that no person shall be appointed or transferred to a local position unless such person has qualified, by examination, in the knowledge and use of the language of the majority of the persons with whom he has to do business. This proviso also affects s. 32 of the original Act which states that every examination shall be held in the English or French language at the option of the candidate.

Indians.—Amendments to the Indian Act (c. 98, R.S.C. 1927) are the subject of c. 31 of the Statutes. Leasing of and granting of the right to prospect, and of surface rights on Indian lands by the Superintendent General, under regulations of the Governor in Council, in connection with mining operations, are more specifically defined. The Minister of Finance is also empowered to authorize advances to the Superintendent General to enable the latter to grant loans to Indian Bands or individual Indians and to finance co-operative projects on their behalf. The total amount of such outstanding advances shall at no time exceed $350,000 and shall be reported annually to Parliament.

Insurance.—C. 21 amends the Canadian and British Insurance Companies Act, 1932, by widening the list of investments for insurance company funds to include equipment trust certificates of Canadian railways, and bonds of certain public bodies of the United Kingdom and of the Dominions.

Justice.—C. 4 amends the Evidence Act (c. 59, R.S.C. 1927) with respect to proof of the mailing of any request, notice, or demand by a department of the public service. A sworn statement of an officer of such department, accompanied by a certificate of registration, a copy of such notice, and a Post Office receipt for delivery shall be evidence of such sending. By a paragraph added to subsection 2 of s. 29 of the Act, an affidavit of a manager or accountant of a bank shall be accepted as proof that the drawer of a cheque on that bank has no account therein.

By c. 11, a minor amendment is made to the Penitentiary Act with respect to period of confinement in gaol or other place pending the determination of appeal not being computed as time served.

By c. 28, the Exchequer Court Act (c. 34, R.S.C. 1927) is amended by deleting the words "upon any public work" at the end of paragraph (c) of subsection 1 of s. 19 thereof. This amendment is very important as it enlarges considerably the field of responsibility of the Crown for its servants' negligence.

C. 44 amends the Criminal Code (c. 36, R.S.C. 1927). In respect to aliens carrying firearms, the burden of proof that an accused person is not an alien is upon him. It is declared an offence to alter or remove any manufacturer's serial number on any firearm capable of being concealed upon the person; in addition to the registration of revolvers and pistols undertaken by the R.C.M.P., provision is made for a general registration of all revolvers and pistols during the period between Mar. 1 and July 1, 1939, and during the same period every five years thereafter; firearms carried by a minor under the age of fourteen elsewhere than in his own dwelling house or premises, without a permit, may be seized. A number of other minor changes are made to the sections dealing with the possession and use of firearms. By s. 11, restrictions are placed upon the publication of reports of judicial proceedings. Penalties are revised or enacted for: failure to stop a motor car after an accident (in connection with which offence, a provision relating to *prima facie* evidence of the accused's intent to escape liability is also added by the amendment); reckless or dangerous driving, and driving when licence has been suspended or an order prohibiting driving has been made by the Court; theft of plants, etc., growing in gardens or cultivated plants growing elsewhere. Minor revisions are made to the sections relating to fraudulent dealing regarding gold, silver, and other precious metal (by s. 424A, which is added, salting mines or samples is made an indictable offence); and penalties for certain offences of arson are modified. Informations or complaints under Part XV of the Criminal Code may be heard and determined and convictions or orders made by any person having the authority of two or more justices of the peace in cases where, by an Act or law, hearing is to be by two or more justices. In the case of an appeal from a judgment of acquittal, the accused shall remain in custody or on bail until the determination of the appeal. Where a person is convicted of more than one offence at the same sitting and more than one fine is imposed with the provision that in default of payment the offender shall be imprisoned, terms of imprisonment may be consecutive. Other minor amendments are also made.

Labour.—For the purpose of continuing to support and supplement the measures of the provinces and other bodies to establish certain unemployed persons in gainful occupations, to train other unemployed persons for like establishment, and to assist those in need and thereby lessen provincial and municipal burdens consequent upon unemployment and agricultural distress, the Unemployment and Agricultural Assistance Act (c. 25) was enacted. The Act authorizes the execution of such undertakings as may be determined and the employment thereon of competent persons who are in receipt of relief. All contracts for such undertakings carried out under provincial jurisdiction but to which the Dominion Government is contributing shall be approved by the Minister of Labour and supervised by the Dominion Government. The Government may enter into agreements with any of the provinces respecting alleviation of unemployment conditions and of agricultural distress and may, where necessary, grant financial assistance by way of a loan to assist the province to pay its share of the expenditures for such purposes. Such agreements may be entered into with corporations or individuals respecting expansion of industrial employment; but no financial assistance shall be granted to any province unless certified statements, as to the province's financial position as the Dominion Government may require, are furnished. The Dominion Government may also examine and audit provincial records related to such works if deemed necessary.

C. 41, cited as the Shop Cards Registration Act, 1938, provides for the keeping of a register of shop cards, in which any labour union may register and thereby ensure exclusive use of any shop card it has adopted. A shop card, when registered, shall endure for fifteen years, but may be renewed for a like period before the expiration of the term. Regulations are laid down concerning application for such registration, action in case of unauthorized use of a registered shop card, and cancellation of or additions and alterations to such a card.

In view of the fact that the facilities of the Dominion Housing Act, 1935, were not made use of by persons with small incomes or by persons living in small communities, that Act is repealed by c. 49 and a new Act substituted therefor. Under Part I of this Act, it is provided that an investigation may be made into existing housing conditions and that the Minister of Finance may take such steps as he considers necessary to improve them and to promote sound construction. The Minister of Finance is empowered, subject to provisions laid down, to enter into contract with approved lending institutions or local authorities for the purpose of joining with them in making loans to assist in the building of houses, under conditions set forth in the Act. In order to encourage the making of small loans in small or remote communities, the Minister shall pay losses sustained by lending institutions or local authorities up to certain specified amounts. Since it is in the national interest that a limited experiment in low-rental housing should be undertaken to create needed employment, Part II of the Act empowers the Minister of Finance, subject to stated provisions, to make loans not exceeding $30,000,000 to local housing authorities for the purpose of assisting in the construction of houses to be built under a low-rental housing project and leased to families of low income. By Part III it is provided that the Minister may, since high real estate taxes have been a factor in retarding the construction of new houses, pay to a municipality in respect of a house constructed between June 1, 1938, and Dec. 31, 1940, 100 p.c. of the municipal taxes on such house for the first tax year, 50 p.c. for the second tax year, and 25 p.c. for the third tax year. Conditions of cost, ownership, assessment, etc., in regard to properties on which such municipal taxes may be paid are enumerated.

Natural Resources and Historic Sites.—Under c. 23, an Act respecting the National Battlefields, Quebec, the Minister of Finance is authorized to continue the payment from Consolidated Revenues of $750,000 ($75,000 per year for a period not exceeding ten years) for the purpose of carrying out the provisions regarding these Battlefields, the term of similar payments under c. 36, 1928, having expired.

The National Parks Act and the Nova Scotia and Prince Edward Island National Parks Act, 1936, are amended by c. 35. Under Part I, Wawaskesy National Park in Alberta is abolished and the boundaries of Elk Island National Park are changed. By Part II, certain lands, set forth in Schedule 2, are withdrawn from P.E.I. National Park.

Certain agreements are set out in the Schedule to c. 36—an Act to amend the Manitoba Natural Resources Acts, the Saskatchewan Natural Resources Act, and the Alberta Natural Resources Act—respecting the confirmation of the transfer to the provinces concerned of the interest of the Crown in the waters and water powers under the Natural Resources Transfer Agreement.

The Northwest Territories Act is amended by c. 38 to permit of the granting of certificates of authority to enter and search any building (including vehicles, conveyances, etc.) which is not a dwelling house and is not within the Northwest Territories, for any thing the shipment and carriage of which is prohibited from such Territories. Powers granted under the certificate, and how seizure is to be conducted and goods disposed of are described.

Parliamentary Representation.—C. 8 amends the Dominion Franchise Act to permit of the annual revision of the lists of electors being omitted for the year 1938.

The Dominion Elections Act, 1938, is the subject of c. 46. The Dominion Elections Act, 1934, the Dominion By-Elections Act, 1936, and the Dominion Franchise Act, 1934, are repealed, and revised legislation is enacted for the exercise of the franchise by electors and for the proper election of Members of the House of Commons. The appointment of the Chief Electoral Officer and his staff, the conditions under which writs of election shall be issued, appointments of returning officers and election clerks, qualifications and disqualifications of electors, preparation of election lists and revision of same, polling procedure and all other matters pertaining to the conduct of elections and the handling of returns are provided for.

Pensions.—The Soldier Settlement Act is amended by c. 14 in regard to the payment by the Board of rates, taxes, and insurance in default by a settler and the repayment of same to the Board. The time for credit on payment of arrears is also extended.

C. 16 amends the War Veterans' Allowance Act by extending its terms to cover veterans of the South African War. The War Veterans' Allowance Board shall consist of from three to five members, each to receive a salary of $6,000 a year except the one appointed chairman who shall receive a salary of $7,000 a year. The powers of the chairman and the Board are defined. Allowances are payable with the approval of the Board to veterans who have been domiciled in Canada for six months immediately preceding commencement of allowance and who are either 60 years of age; under 60 years but permanently 'unemployable'; or, having served in a theatre of actual war, are, in the opinion of the Board, incapable and unlikely to become capable of maintaining themselves.

Veterans who are physically and mentally capable or who are already in receipt of old age pensions are not entitled to benefit under this legislation.

Royal Canadian Mounted Police.—The Royal Canadian Mounted Police Act is amended by c. 24 with regard to the specific application of Parts I and III of the original Act to members of the Reserve called up for duty, and to stoppage of pay in addition to other penalties for absence without leave. Time served in the permanent naval, military, or air forces is to be included in the 'term of service' for purposes of computing pension (in previous legislation the 'permanent forces of Canada' was specified). The sections under which constables may be required to retire or pensioned constables may be recalled are also amended.

Trade and Commerce.—Cc. 19 and 20 are Acts respecting trade agreements between Canada and Guatemala and between Canada and Haiti, respectively. Most-favoured-nation treatment is extended, reciprocally, between the parties concerned. The Articles of agreement are set forth in a Schedule to each Act.

The Copyright Amendment Act of 1931 is, by c. 27, to be now read and construed with the Copyright Act (c. 32, R.S.C. 1927). Both pieces of legislation are amended in several respects, the chief being in regard to fees, charges, or royalties collectable from radio or gramophone performances. No such fees, etc., are collectable for performances in places other than theatres ordinarily used for entertainments to which an admission charge is made but the Copyright Appeal Board shall provide for collection from radio broadcasting stations or gramophone manufacturers of adequate fees, etc., the amount of these to be fixed by the Board.

The inspection and sale of binder twine and the weight of a bushel of each of 33 commodities commonly traded in are regulated or fixed by c. 32 and the Inspection and Sale Act (c. 100, R.S.C.) is repealed. Part I of the legislation deals with binder twine and how it must be labelled for sale in Canada. Any duly appointed inspector has the right of entry upon premises, etc., to examine binder twine. Binder twine damaged by fire or water shall not be offered for sale unless it has been reconditioned and so labelled, or conspicuously labelled as 'damaged'. Penalties are laid down for violation of the Act. Part II of c. 32 lays down the legal weights of a bushel of each of 33 commodities and provides penalties for breaches of observance in all contracts for sale and delivery.

Transportation.—*General.*—By c. 53, a Board of Transport Commissioners for Canada is established with authority in respect to transport by railways, ships, and aircraft. Part I of the Act requires that the Board of Railway Commissioners is in future to be known as the Board of Transport Commissioners and references to the former body are to be so interpreted in the Railway Act and any other Act. The Board of Transport Commissioners is to co-ordinate and harmonize the operations of all carriers by railway, ship, and aircraft. The Board is to decide whether public convenience or necessity requires such transport before granting licences and may accept certain evidence as set forth in the Act in proof of public convenience and necessity. Part II of the legislation relates specifically to transport by water and governs the issuance of licences and related matters in this respect. Part III enacts similar legislation for transport by air. Part IV governs matters of traffic, tolls, and tariffs. Part V stipulates that, notwithstanding anything previously enacted, carriers and shippers may agree between themselves on charges for transport of goods, but such agreed charge must have the approval of the Board. Details regarding the manner in which such agreed charges shall be made and approved are laid down. Part VI empowers the Board, when requested by the Minister of Transport, to inquire into the matter of harbour tolls and the matters to which the Board shall direct their attention in making such inquiries are set forth. If, as a result, harbour tolls should be amended, the Board shall make a corresponding recommendation to the Minister.

Airways.—By c. 15, the Trans-Canada Air Lines Act, 1937, is amended as regards the business and powers of the Trans-Canada Air Lines Corporation. The Corporation is empowered to purchase or dispose of shares of a new transatlantic aerial transport company to be organized jointly by nominees of the Government of the United Kingdom and the Government of Eire. The scope of operation of the Corporation is extended to cover routes partly within and partly outside of Canada.

Radio.—The Radio Act, 1938, is the subject of c. 50. Hereunder the Governor in Council is empowered to prescribe the tariff of fees to be paid for licences, etc., and the payments to be made from such fees for services rendered in connection with issuing such licences; to accede to any international convention on radio and make such regulations as may be necessary to carry out the terms of such convention; to regulate radio in case of war, rebellion, riot, or other emergency. The field in which regulations may be made by the Minister of Transport is also defined. Except in the case of motor cars and other vehicles temporarily in Canada, no person shall establish a radio station or private receiving station unless licensed. Only British subjects shall be employed as radio operators at coast, land, or mobile stations and such operators shall subscribe in the proper way as laid down to the Declaration of Secrecy set forth in the Schedule to the Act. Penalties are defined for transmitting false or fraudulent messages and for establishing stations without licence and warrants may be issued and powers of search given to any police officer or officer appointed by the Minister and named in the warrant.

Railways.—C. 3 relates to the appointment of auditors for the National Railways for the year 1938.

The Board of Railway Commissioners for Canada is empowered, under c. 12, to deal, upon application, with questions of unreasonableness or unjust discrimination in respect of telephone tolls resulting from changes in boundaries of base-rate areas or telephone exchange areas.

Refunding of maturing obligations for the Canadian National Railways is provided for in c. 22 and, subject to provisions laid down, the National Company may issue notes or other securities in respect to such refunding to the amount of $200,000,000.

Further amendment to the Railway Act (c. 170, R.S.C.) is made by c. 40. Snow fences erected by a railway company along its route or line must, if damages are suffered, be compensated for either by mutual agreement, or, failing this, in the manner provided by law with respect to such railway or, alternatively, at the option of the claimant, by the Board of Railway Commissioners for Canada. Compensation by process of law alone was previously provided for.

The Canadian National Railways Financing and Guarantee Act, c. 43 of the Statutes, empowers the Canadian National Railways to issue securities for refunding to the extent of $9,019,233 and for capital expenditures to an amount not exceeding $8,555,000. Such securities may be turned over to the Minister of Finance in return for loans from the Consolidated Revenue Fund not exceeding the aggregate of the amounts mentioned. The National Company may use the proceeds of the securities or make advances to other companies comprised within the National Railways System. Stipulations as to the form of guarantee of principal, interest, and sinking funds are laid down.

Shipping.—Part V of the Canada Shipping Act, 1934, relating to sick mariners and marine hospitals is amended by c. 6 of the Statutes for 1938. The exempted classes of vessels subject to duty payments under s. 305 of the original legislation are now extended to include barges, scows, or lighters which do not carry crews and are not self-propelling.

By c. 17, the Winnipeg and St.Boniface Harbour Commissioners Act is amended. The harbour limits and waters are re-defined to take in 'municipalities' and waters belonging thereto which have been or may be brought under the provisions of the Act subsequent to the passing of the original legislation. Additional amendments cover such matters as appointment of additional Commissioners, surplus profits disposition, and inspection of accounts.

By c. 26 a new section, *viz.*, 703A, is added to Part XVI of the Canada Shipping Act, 1934, so as to prohibit the shipment or transhipping on the high seas of articles of war, by a ship registered in Canada, to countries in a state of war. The Governor in Council may make regulations designating such countries, prescribing times during which the provisions shall apply, exempting certain defined articles in the case of any designated country, and other matters.

Officers empowered to carry out the provisions of the Shipping Act or a consular officer or an officer as defined under the preventive measures provisions of the Customs Act are given additional powers under this legislation to enable them to carry out its provisions.

Under c. 34, an Act to amend the National Harbours Board Act, 1936, right of action against the National Harbours Board arising out of any contract entered into in respect of its undertaking or out of any death or injury to person or property resulting from the negligence of an officer of the Board while acting within the scope of his duties may be enforced in any court having jurisdiction for like claims between subjects. Particulars covering procedure, costs, etc., are laid down.

C. 37 amends the New Westminister Harbour Commissioners Act by re-defining the boundaries of New Westminster harbour and providing for the remuneration of the Commissioners.

Miscellaneous.—The Opium and Narcotic Drug Act, 1929, is amended in several minor respects by c. 9 of the 1938 Statutes. Dihydrocodeine (paracodeine) is added to the drugs listed under Part II of the Schedule to the Opium and Narcotic Drug Act as enacted in 1932 (c. 20, 1932).

By c. 10 the Agreement of Mar. 30, 1920, with the city of Ottawa for a cash payment in lieu of part of rates and taxes for civic services and water, and in settlement of certain claims, which has been extended annually, is further extended for another year as from July 1, 1937.

The powers and duties of the High Commissioner for Canada in the United Kingdom as well as the manner of appointment of himself, his officers, and clerks are re-enacted in c. 30. The High Commissioner's Act (c. 92, R.S.C.) is repealed.

To enable Canada to fulfil her part of the North Pacific Pelagic Sealing Convention (1911), c. 39, the Pelagic Sealing (Convention) Act, 1938, empowers the Governor in Council to make regulations for the purpose of carrying out the Convention. Classes of officers who may board and search vessels are described and seizure and detention of vessels for reasonable cause, the same to be held for later adjudication by the Exchequer Court of Canada, is authorized. The importation into, or possession within, Canada of skins taken in contravention to the Act is prohibited as well as of skins belonging to American, Russian, or Japanese herds. Conditions under which Indians may carry on pelagic sealing are stated and no national or inhabitant of Canada shall engage in, nor shall a vessel registered in Canada be used for, the killing or capturing or pursuing of sea otters in Convention waters beyond three miles from shore.

Section 2.—Principal Events of the Year.

Subsection 1.—The Economic and Financial Year, 1938.*

Economic conditions showed improvement toward the end of 1938, after having been relatively steady during the first eight months. Productive operations rose in September and continued active for the rest of the year, the index of the physical volume of business averaging only 8 p.c. below the high level of 1937. The gain in the output of field crops was about 37 p.c., but the decline in prices resulted in a 5 p.c. reduction in value. Industrial employment was relatively well maintained, the index receding only 2 p.c. from the average of 1937. Tourist expenditures were estimated at over $273,000,000, a decline of 6 p.c. from the preceding year.

The financial background continued strong, deposits of the banks reaching a new high point. Prices of Dominion bonds averaged higher than at any time since the early years of the century. Despite sharp fluctuations common stock prices were well maintained over the year, no important trend either in an upward or a downward direction having developed. Wholesale prices were reactionary, the downward movement which began in July, 1937, having been continued until the end of the year under review. The indexes of the physical volume of business for the latest three years are given below, the base year being 1926.

Month.	1936.	1937.	1938.	Month.	1936.	1937.	1938.
January	106·2	116·9	111·8	August	113·5	123·4	110·5
February	104·8	115·0	106·7	September	120·0	123·8	119·2
March	104·0	118·7	108·8	October	121·5	127·4	118·6
April	111·0	124·0	112·4	November	118·0	127·9	123·4
May	107·6	122·0	110·7	December	118·4	121·4	115·6
June	111·1	126·0	108·4				
July	110·8	126·5	109·1	AVERAGES	112·2	122·7	112·9

---

* Prepared by Sydney B. Smith, M.A., Business Statistician, Dominion Bureau of Statistics. See also the bulletin "Business Conditions in Canada, 1938", which may be obtained from the Dominion Statistician, *Price, 25 cents.*

Agriculture.—It is calculated that the principal field crops yielded over one-third more than in 1937, but in interpreting the significance of this statement it must be recalled that the crops of that year were at a minimum for the post-War period. The increased exportable surplus favoured railway and shipping interests and increased the volume of the export grain trade with consequent beneficial results. The recovery in production, however, was not fully reflected in proportionately greater net income. Increases in supplies and reduced demand combined to cause a steep decline in farm product prices.

The net value of agricultural production in 1938 was placed at $728,000,000 compared with $679,000,000 in the preceding year. Field crops were worth a gross of $528,860,000, which was $27,400,000, or 5 p.c., below the estimated value of the output of 1937. The low yield of that year and the reduced prices of 1938 resulted in successive reductions in the value of the crops of the two years. Cattle and hogs slaughtered during the year showed declines of 5·6 p.c. and 17·5 p.c., respectively, but the abundance of feed grains and fodder was an important factor as the year drew to a close. While prices were low, the availability of feed in substantial quantities was of decided advantage to the producers of live stock and live-stock products. The oat crop amounted to 371,000,000 bushels, an increase of almost 103,000,000 bushels over 1937. The dairy situation was dominated by the large stocks of butter on hand. Production increased sharply in 1938 due to relatively high prices early in the year. The dairy industry continued to show expansion and total milk production was estimated at close to 17,500,000,000 pounds.

Mining.—The mining industry advanced to a new high level, showing a gain of 2·6 p.c. in the volume of production and 1·8 p.c. in employment as compared with 1937. The gain in production was not sufficient to offset the decline in base metal prices, the total value having been about $440,600,000 against $457,400,000 in the preceding year. The excellent showing in the face of business recession clearly demonstrates the significance to Canada of the diversified nature of the production. The returns from the metal group would have been less impressive but for the notable improvement in the output of gold, and the almost three-fold increase in the output of petroleum which offset much of the loss in value recorded by some of the principal minerals of the non-metallic group.

Forestry.—Owing to over-stocking in the closing months of 1937 in anticipation of an increase in prices, and the considerable decline in consumption by United States publishers due to economic reaction, the output of newsprint at 2,624,580 tons showed a decline of 28 p.c. from the high level of 1937. The value of newsprint exports was $104,600,000 against $126,500,000, a decrease of 17·3 p.c.

The world's manufacture of rayon yarn doubled between 1932 and 1937, resulting in an increased demand for Canadian wood-pulp. The wood-pulp industry, however, showed reaction in 1938, responding to reduced demand due to the war activities of Japan and world-wide economic reaction. Exports of pulp of various kinds declined from 17,414,317 tons to 11,080,742 tons.

The lumber industry in Eastern Canada was beset with difficulties during 1938. Exports of planks and boards totalled 1,667,000,000 feet valued at $35,900,000, against 1,858,000,000 feet valued at $45,400,000 in 1937. The lumber industry of British Columbia, however, set a record last year with a new maximum in exports to the United Kingdom. Shipments to that market were 741,000,000 feet compared with 648,000,000 feet, the previous record established in 1937. Total shipments from the province to overseas markets were 1,036,000,000 feet against 999,000,000 in 1937.

Electric Power.—The output of electric power during 1938 showed a decline of 5·8 p.c. from the maximum of 27,600,000,000 kwh. reached in the preceding year. The reduction was largely accounted for in secondary power delivered to boilers, reflecting a lessened demand for this type of energy by the pulp and paper industry. The output less exports and deliveries to electric boilers was nearly maintained at 18,380,000,000 kwh. against 18,424,000,000, a decline of less than one-quarter of one per cent.

During 1938, a substantial increase was shown in new generating capacity of electric power and in transmission and distribution facilities. Water-power installation during the year was about 135,459 h.p., bringing the total for the Dominion at the end of the year to 8,191,000 h.p. The greater part of the increase was made up by extensions to existing stations in British Columbia, Manitoba, and Quebec. Canada is now the world's second largest per capita producer of electricity.

Fisheries and Trapping.—The fishing industry of the Maritime Provinces was rewarded with good catches in 1938. Difficult marketing conditions developed as demand slackened in several European countries and other outlets had overabundant supplies. The exports of fish in the twelve months ended December declined over 5 p.c. in value from the preceding year. Salmon canned in British Columbia showed a good gain over 1937. The catch of sockeyes was one of the largest in years and prices were well maintained. As the output of furs is largely exported, the downward fluctuation in the outward movement indicates that the high level of the value recorded in 1937 was not repeated in the year under review. The value of exports in the twelve months ended December, 1938, was $14,097,000 as against $17,515,000 in the preceding year.

Manufacturing.—The prices of materials used in manufacturing plants showed a marked drop during the year and net revenues were consequently more favourable than was indicated by indexes of volume and employment. The manufactured output for the year showed a recession from the high level of 1937, but improvement was recorded over 1936 and other post-depression years. Expansion in operations was apparent after August, 1938. The index of the volume of manufactures, based on thirty factors, averaged 107·5 against 123·4. A better relative showing was made by the records of employment, the index having been 111·2 as compared with 114·4.

Construction.—Contracts awarded during 1938 were valued at $187,300,000, a decline of 16·4 p.c. from the $224,100,000 reported for the preceding year. Contracts placed for business structures rose 14·5 p.c. while the industrial and engineering divisions showed important decline. The gain in the value of apartments was 34·3 p.c., while residences declined 6·2 p.c. Loans under the National Housing Act amounted to $14,600,000 in 1938, 17 p.c. above the combined totals for 1936 and 1937. Total Home Improvement loans reported to the Department of Finance to the end of the year amounted to $24,500,000, numbering 61,299 different projects.

External Trade.—Canadian exports in 1938 were close to the billion-dollar mark. The decline of 15 p.c. from the preceding year was due mainly to the short supply of wheat during the early part of the year, the depressed conditions in external markets, especially the United States, and price reversals. Shipments of wheat in bushels were 37 p.c. less for the first seven months of 1938 than in the same period of the preceding year. Trade with the United Kingdom was practically equal to that of 1937, a gain in base metals and gold largely offsetting the decline in farm products.

Canada had a credit balance from external trade of $279,000,000 in 1938 against $316,000,000 in 1937. Exports of domestic products then totalled about $913,000,000 and goods re-exported about $43,000,000, while imports were $677,000,000. Exports in 1937 were $1,110,000,000, goods re-exported $15,000,000, and imports $809,000,000.

Internal Trade.—Except in the automotive and a few other lines dealing in durable or luxury merchandise, retail trade was well maintained. Monthly sales for twelve lines of retail business dealing in food, clothing, and household effects and requirements fluctuated within a limit of 8 p.c. from the same months of 1937, while dollar sales revealed a decline of only 2 p.c. for the year.

There were 121,411 new motor vehicles sold for $135,300,000 in 1938, a decrease of 16 p.c. in number and 9 p.c. in value from the 144,441 units which retailed for $149,200,000 in 1937. In the last quarter the unfavourable comparison was reversed, sales having shown advances of 11·4 p.c. and 6·1 p.c., respectively.

Transportation.—Railway operations reflected the general level of business activity. The scope of decline in the traffic movement was indicated by a drop of 7·8 p.c. in carloadings, the total having been 2,429,000 cars against 2,635,000 in 1937. The traffic in grain, ore, and pulpwood recorded increases, contrasting with declines in other main groups. The decline in gross revenues of the Canadian National was more than $15,000,000, or nearly 5 p.c., and the decline in net revenue between ten and eleven million dollars. Gross operating revenues of the Canadian Pacific were $142,300,000 against $145,100,000, a decline of only 2 p.c.

The traffic passing through the Welland canal rose to a new high point during the navigation season of 1938. Large shipments of grain were the chief factors in the increased traffic, which amounted to 12,600,000 tons against 11,700,000 in 1937. The St. Lawrence system also created a new record with 9.236,000 tons against 9,195,000. The increases in grain, gasoline, sugar, and hard coal were the main factors in the general result. The marked decline shown in the downward movement of iron ore through the combined locks of the Sault Ste. Marie canal was one of the factors in the severe drop in the total movement on that canal during 1938.

Employment.—Employment averaged greater during 1938 than in any other year in the post-War period excepting 1937, 1930, and 1929. Most branches of factory employment reported that activity was reduced from the level of 1937 but afforded more employment than in 1936. The mining industry, as a whole, showed slight improvement over the previous maximum reached in the preceding year, the metal division recording the main increase. Logging was quiet following the exceptional activity of 1937. Highway work afforded more employment than in any other year since 1934, partly owing to unemployment relief projects. Building showed no general change from 1937.

It was estimated that the number of wage-earners employed in 1938 averaged 2,303,000 against 2,369,000 in the preceding year, while wage-earners unemployed numbered 401,000 against 337,000. Aside from 1937, the unemployment situation was better than in any other year since 1930.

The number receiving direct aid in 1938 averaged 870,100, a distinct improvement over the 965,900 recipients in the preceding year. The reduction was mainly limited to those receiving urban aid.

Prices.—The prospect of heavier field crops was a bearish influence leading to an accelerated decline in prices during July and August, 1938. Subsequently the decline was practically halted and fluctuations in the general average were insignificant in the weeks following the first of September. The increase in rearmament expenditures on a widespread scale was one of the main influences in supporting metal prices, but the appearance of economic revival in the United States toward the end of the year also engendered an improved undertone on commodity markets. The general index of wholesale prices averaged 78·6 in 1938 against 84·5 in the preceding year, a decline of 7 p.c.

During 1938 the index of raw and partly manufactured products declined from 80·8 to 64·9. A marked drop was shown in Canadian farm products, the crop index receding from 83·9 to 53·8. The recession in animal products produced on Canadian farms was minor, the index being 82·8 as compared with 84·6 in the previous December.

Reaction on the stock markets at the end of the first and third quarters was counterbalanced by subsequent rallies. Stocks strengthened in the final week and year-end prices were close to the maximum for the preceding fifteen months. The expansion in industrial operations during the last four months of the year afforded support, but reaction in wholesale prices injected a note of caution. The depressing effects of almost continuous political uncertainty in Europe and Asia affected conditions. Dividend payments by companies in Canada were estimated at $322,500,000 compared with $323,700,000 in 1937.

Banking and Insurance.—A continuance of the tendencies in evidence during preceding years characterized banking operations in 1938. The official rate of discount remained at 2½ p.c. The central bank allowed its reserve ratio to fall during the year from 57·2 p.c. to 53·7 p.c. by devoting all but a small proportion of its additional resources to the purchase of Dominion and Provincial Government securities. Nearly half of the holdings was converted from long-term securities into short-dated ones. The bank experienced no difficulty in maintaining the exchange rate which, on the whole, moved with the United States dollar.

The demand for current loans showed improvement, the average gain amounting to 7·4 p.c. The sum of notice and demand deposits continued to increase, rising by about $56,000,000 to $2,321,000,000, which had the effect of augmenting the ratio of current loans to notice deposits from 43·6 p.c. to 48·2 p.c.

For the life insurance companies, 1938 was a progressive year. Sales of life insurance in Canada for 18 leading companies were $375,500,000 against $386,000,000 in the preceding year, a decline of only 2·7 p.c.

Public Finance.—Dominion revenues from Apr. 1 to the end of December were $394,800,000 against $402,300,000 in the first nine months of 1937, the increase in income tax collections tending to offset declines in customs and excise taxes.

Total ordinary expenditures were $288,300,000 in the first nine months against $283,500,000. Taking in additional disbursements under the headings of capital and special expenditures and government-owned enterprises, the comparison was $366,900,000 against $361,900,000.

Subsection 2.—Other Principal Events of the Year.

THE ROYAL TOUR OF CANADA.

Preliminary Arrangements.—Soon after the Royal Visit to Canada was definitely projected, that is, several months prior to the arrival of the Royal Party from the United Kingdom, an Interdepartmental Committee under the chairmanship of Dr. E. H. Coleman, Under-Secretary of State, was organized to take care of the preliminary arrangements, including the times and places where the Royal Train would stop, the complete itinerary across Canada, and all program details during each stop-over. The schedule was carefully drawn up by the close co-operation of this Committee with the Provincial Governments and Municipal authorities, but the plans were disorganized at the last minute because of bad weather off Newfoundland which delayed the progress of the Royal Yacht *Empress of Australia* and caused her to be two days late at Quebec.

This unpredictable misfortune necessitated program adjustments at Quebec, Montreal, Ottawa, and Kingston, but the Committee and all who co-operated rose to the demands placed upon them, and the tour across Canada was carried out with unqualified success. His Majesty, in a farewell letter sent to Dr. Coleman just prior to his departure, expressed his pleasure and his "personal and most sincere thanks" to all concerned with the arrangements.

Personnel of the Royal Party.—The personnel of the Royal Party which arrived at Quebec on the *Empress of Australia* consisted of:—

HIS MAJESTY THE KING.

HER MAJESTY THE QUEEN.

Ladies in Waiting	Lady Nunburnholme. Lady Katharine Seymour.
Lord in Waiting to the King	The Earl of Eldon.
Lord Chamberlain to the Queen	The Earl of Airlie, G.C.V.O., M.C.
Acting Private Secretary to the King	A. F. Lascelles, Esq., C.B., C.M.G., M.V.O., M.C.
Medical Officer	Surgeon-Captain H. White, R.N.
Chief Press Liaison Officer	G. F. Steward, Esq., C.B.E.
Assistant Private Secretary to the King	Captain M. Adeane.
Equerries to the King	Lieutenant-Colonel the Honourable Piers Legh, C.M.G., C.I.E., C.V.O., O.B.E. Commander E. M. C. Abel-Smith, R.N.

After the arrival of Their Majesties on Canadian soil, the Party was augmented by the following personnel:—

Attached from Government House, Ottawa:	
From Quebec to Ottawa—	
Secretary to the Governor General	A. S. Redfern, Esq.
At Quebec, Ottawa, and throughout the remainder of the Tour—	
Comptroller of the Household	Lieutenant-Colonel E. D. Mackenzie, C.M.G., D.S.O.
Canadian Ministers:	
The Prime Minister of Canada	The Right Honourable W. L. Mackenzie King, P.C., M.P., LL.D.
(Other Ministers travelled on the train at various stages of the Tour.)	
Canadian Officials:	
Under-Secretary of State and Chairman of the Interdepartmental Committee on the Royal Visit	E. H. Coleman, Esq., K.C., LL.D.
Dominion Archivist and Historian of the Royal Tour	Gustave Lanctot, Esq., K.C., D.Litt., LL.D.
Commissioner, Royal Canadian Mounted Police	Brigadier S. T. Wood.
Adjutant-General	Major-General H. H. Matthews, C.M.G., D.S.O.
Principal Secretary to the Prime Minister.	A. D. P. Heeney, Esq., M.A., B.C.L.
Secretary, Interdepartmental Committee on the Royal Visit	H. L. Keenleyside, Esq., M.A., Ph.D.
Member of the Secretariat	Brigadier-General Edouard de B. Panet, C.M.G., D.S.O.
Press Liaison Officer	W. J. Turnbull, Esq.
Assistant Commissioner, Royal Canadian Mounted Police	Colonel C. H. King.

Notable Incidents of the Tour of Canada.—On May 17, 1939, for the first time in history, a British Sovereign set foot on the soil of one of his Dominions. In this case it was on soil that Frenchmen had discovered and then colonized about three hundred and thirty years ago.

From the moment when Their Majesties stepped from the Royal Yacht *Empress of Australia* at Quebec until their departure on the Royal Yacht *Empress of Britain* from Halifax on June 15, they were the centre of demonstrations of spontaneous loyalty and warm affection from every part of the Dominion, such as have never before been witnessed in British North America.

The purpose of the Tour was not solely to enable the King and Queen to see their Canadian subjects or the expanse of the Dominion from Atlantic to Pacific, nor yet to permit Canadians everywhere an opportunity of seeing Their Majesties. It had a far deeper significance to which the Queen herself gave expression in her speech, delivered in Ottawa in the early stages of the Tour, on the occasion of the laying of the corner-stone of the Supreme Court building. Her Majesty gracefully referred to her "fondest wish" to see "two great races with their different legislations, beliefs and traditions uniting more and more closely, after the manner of England and Scotland, by ties of affection, respect and of a common ideal".

The immediate effect of the Visit has been precisely that. It has brought to the surface a fundamental unity of feeling throughout Canada and between peoples differently moulded which, though it existed previously, was in some danger for want of tangible expression. This unity has now been strengthened and rests the more firmly for having found such expression, through the symbol of the Crown, in the actual persons of their Sovereigns.

The Tour itself centred around the attendance of the King and Queen at the Dominion Parliament Buildings and at the Legislative Halls of each province.

From the Chateau Frontenac at Quebec, the King made his first radio speech of the Tour, addressing greetings to his Canadian subjects in both English and French. In the metropolis of Montreal the warmth of the reception given to Their Majesties was particularly marked. Hundreds of thousands of visitors from neighbouring communities and the United States flocked into the city for the occasion.

At Ottawa the King presided in person over his Parliament of Canada; assented to specific legislation of the 1939 Session, including the Trade Treaty between Canada and the United States; received the credentials of the new United States Minister to Canada; and unveiled the National War Memorial in circumstances which will be hallowed in the memories of all who were privileged to take part in or attend the ceremony.

In Toronto the King and Queen touched all hearts by paying an unscheduled visit to the grounds of the Christie Street Military Hospital where they chatted with several of the patients. This tribute to 'returned' men was typical of Their Majesties' attitude on all occasions throughout the Tour. When in Ottawa they had mingled for a full half hour with the Veterans assembled for the unveiling of the National War Memorial and at all places where stops were made they showed a keen interest in the welfare of all who had served in the Great War. The broad humanity of the Royal couple was also shown in their private and quite unscheduled talks with many people from all walks of life. They seemed eager to know their Canadian subjects in an intimate way and not merely to meet and see them. At scores of places along the line, wherever crowds were assembled, the Royal Train was ordered by His Majesty to slow down or stop, and both the King and Queen did everything possible to satisfy the multitudes that thronged at all points along the route.

From Winnipeg, half way across the Dominion, the King, on the afternoon of Empire Day, May 24, spoke to his Empire over an international network arranged by the Canadian Broadcasting Corporation. As a prelude to the address of His

Majesty an impressive "Roll Call of Empire" was given. This embraced the Motherland, the Dominions, the Indian Empire, Colonies and Protectorates, Island Groups, and all parts of the world where the Union Jack flies; those who took part were mainly typical people representing the masses — each with a message of loyalty and appreciation for the freedom, tolerance, and understanding which, as citizens in the British Commonwealth, they enjoy and for which the Crown stands. At Winnipeg also, the Hudson's Bay Company "paid their rent" in the form of two elk heads and two black-beaver skins. The old and quaint ritual by which payment was made dates back to the seventeenth century and was another link with the past, recalling the exploits of those "Gentlemen Adventurers" who established the Hudson's Bay Company and conquered the vast northwest for England.

Everywhere Their Majesties saw that the 'daughter', now 'mistress in her own house', had developed fundamentally along the lines of British tradition as defined through the ages. In His Majesty's own words at the Guildhall on his return to England this sentiment is expressed as follows: "I saw flourishing as strongly as they do here, institutions which have developed century after century beneath the ægis of the Crown; institutions British in origin, British in their slow and almost casual growth . . . . and I counted it a high privilege to be the first of my line to play some part in giving them practical effect".

When at Vancouver, His Majesty took part in the "Ceremony of the Mace". This Mace, presented to the city by a former Lord Mayor of London, is an exact replica of the Lord Mayor's Mace. No other Canadian corporation boasts one. The King and Queen enjoyed a drive of 51 miles—the longest single motor drive of the Tour—around the environs of this beautifully situated Pacific Gateway. On leaving Vancouver for Victoria by the S. S. *Marguerite* they were escorted as far as Point Grey by 16 Indian war-canoes and 500 flag-bedecked yachts and fishing boats. There they were picked up by H.M.C. Ships *Ottawa, Restigouche, St. Laurent,* and *Fraser* and an escort of the R.C.A.F.

Their Majesties had evidently been deeply touched by their outward trip from Quebec to Victoria. When the King spoke at Victoria he stated: "To travel through so grand a country is a privilege to any man; but to travel through it to the accompaniment of such an overwhelming testimony of goodwill from young and old alike, is an experience that has, I believe, been granted to few people in this world".

Before his departure from Halifax the King unveiled, in the Legislative Chamber, a portrait of his late father, King George V, which had been painted by Sir Wyly Grier. At the close of the Tour on June 15, His Majesty, again speaking in both English and French, broadcasted a farewell address to the Canadian people. On this occasion he summed up, in well-chosen phrases, the outstanding impressions of the Visit and the direction of Canada's destiny as he felt it to point. Her Majesty also spoke, addressing herself particularly to the women and children of Canada.

The Royal Party departed from Halifax on the Royal Yacht *Empress of Britain* amidst the cheers of 150,000 people who thronged the piers and crowded every point of vantage. A huge bonfire on Chebucto Head—visible long after the shouting and cheering of those on shore were lost to the Royal Yacht—was Canada's parting farewell to the Royal couple.

From the time it left Quebec until its arrival at Halifax the Royal Train, preceded by the Pilot Train (conveying representatives of the Press, the Canadian Broadcasting Corporation, the official photographers, etc.) travelled 9,510 miles, of which 8,411 were over Canadian railways and 1,099 over United States lines.

There follows a condensed itinerary of the trip. In recording this itinerary it should be mentioned that only at Provincial capitals were loyal addresses of welcome actually read, all civic addresses being simply handed to His Majesty. Again, no clearly marked distinction has been drawn between localities through which Their Majesties merely passed and those where a Royal Progress was made through the streets. The whole aim in preparing this summary is to do justice to the events in the provincial capitals and larger centres of population in chronological order.

ITINERARY OF THE ROYAL TOUR OF CANADA.

Quebec.—*Wednesday, May 17*—Their Majesties arrived at Quebec on the R.M.S. *Empress of Australia*, accompanied by a naval escort consisting of H.M.S. *Southampton*, H.M.S. *Glasgow*, H.M.C.S. *Skeena*, and H.M.C.S. *Saguenay*, and an air escort provided by the Royal Canadian Air Force. On landing, they were welcomed to Canada by the Prime Minister of Canada, who also acted as Minister in Attendance throughout the tour. The Dominion Cabinet also met Their Majesties, as did His Honour the Lieutenant-Governor of Quebec, the Premier of Quebec, His Worship the Mayor of Quebec, and a host of other Dominion, Provincial, and Municipal Officials.

Their Majesties spent the whole day in Quebec, the principal events being: the welcomes of the Provincial and Civic Governments, the luncheon given by the Dominion Government to which all members of His Majesty's Privy Council for Canada were invited, the demonstration by school children in the historic Battlefields Park, and the banquet given by the Provincial Government. His Majesty greeted his Canadian subjects in a speech delivered at the Dominion Government luncheon and broadcasted across the Dominion by the Canadian Broadcasting Corporation. Their Majesties stayed overnight at the Citadel.

Montreal.—*Thursday, May 18*—The Royal Party arrived at Montreal, after a short stop at Three Rivers. Their Majesties spent the afternoon driving around the city, when they viewed the recently-restored historic fortifications on St. Helen's Island, were received at the City Hall, and had tea at the Chalet on Mount Royal. In the evening they attended a dinner given by the City of Montreal at the Windsor Hotel.

Ottawa.—*Friday, May 19*—His Majesty's first official act at the Capital was to receive in audience the newly-appointed United States Minister to Canada, who presented his credentials. Following this, His Majesty received the Heads of Missions and the Accredited Representatives of the countries of the British Commonwealth. In the afternoon, Their Majesties proceeded to the Houses of Parliament, where His Majesty gave the Royal Assent to certain legislation passed in the current session and addressed the members of both Houses. In the evening a State Dinner was held at Government House. *Saturday, May 20*—Following the Trooping of the Colour in celebration of His Majesty's birthday, Her Majesty officiated at the laying of the corner-stone of the new Supreme Court Building, her speech being broadcast. Afterwards Their Majesties drove through the City of Hull. A garden party at Government House and a Parliamentary Dinner occupied the rest of the day. *Sunday, May 21*—The unveiling of the National War Memorial took place in the morning and His Majesty's speech was broadcast. Their Majesties left for Toronto, travelling *via* Coteau Junction, Cornwall, Brockville, Kingston, and Cobourg.

Toronto.—*Monday, May 22*—The welcome by the Civic and Provincial Governments, the presentation of Colours by Her Majesty to the Toronto Scottish Regiment (M.G.), and the attendance by Their Majesties at the running of the King's Cup at Woodbine Park were the most notable events in the Ontario Capital.

Winnipeg.—*Wednesday, May 24*—Travelling *via* Carley, MacTier, White River, Schreiber, Port Arthur and Fort William, Raith, Ignace, Busteed (night), and Rennie, Their Majesties arrived in the Manitoba capital on the morning of the 24th. Following the civic reception at the City Hall and the Provincial Government reception at the Legislative Buildings, Their Majesties drove to Government House, where His Majesty broadcasted his first Empire Day speech. After the Lieutenant-Governor's luncheon, Their Majesties drove to Fort Garry Park, where the traditional tribute was received from the Governor of the Hudson's Bay Company. In the evening the Royal Train left for Portage La Prairie, Brandon, and Kemnay (night).

Regina.—*Thursday, May 25*—Arriving *via* Elkhorn and Broadview, Their Majesties received Civic and Provincial Government welcomes, had tea at the Royal Canadian Mounted Police barracks and dined at Government House. They left for Alberta *via* Moose Jaw and Waldeck (night).

Calgary.—*Friday, May 26*—Their Majesties arrived at Calgary, having travelled *via* Medicine Hat, Suffield, and Bassano. They were greeted by 2,000 Indians of the Blackfoot, Blood, Peigan, Stone, and Sarcee tribes. In the evening Their Majesties left for Banff, where they spent the time in relaxation and sight-seeing until Sunday morning.

Vancouver.—*Monday, May 29*—Having spent the previous day travelling through the Rockies, *via* Field, Beavermouth, Stoney Creek, Glacier, Revelstoke, Sicamous, Monte Creek, Kamloops, and Keefers (night), the Royal Train arrived at Vancouver in the morning. Following the reception at the City Hall, where His Majesty performed the Ceremony of the Mace and attended a civic luncheon, Their Majesties were taken for a long drive through Vancouver and its environs. In the evening they left for Victoria escorted by H.M.C. ships *Fraser*, *Ottawa*, *Restigouche*, and *St. Laurent*, and by aeroplanes of the Royal Canadian Air Force, and stayed at Government House.

Victoria.—*Tuesday, May 30*—After receiving Civic and Provincial Government welcomes, Their Majesties attended a luncheon given by the Government of British Columbia; His Majesty addressed the gathering, his speech being broadcast by the Canadian Broadcasting Corporation. In the afternoon, the King presented a Colour to the Royal Canadian Navy, this being the first naval ceremony of this nature to be held outside the United Kingdom. The following day Their Majesties left Victoria and travelled *via* Vancouver, New Westminster, Mount Lehman, Chilliwack, Hope, Boston Bar, Mount Robson, and Red Pass Junction to Jasper, arriving on *Thursday, June 1*. Here Their Majesties enjoyed the beauties of Jasper National Park for half a day.

Edmonton.—*Friday, June 2*—Travelling *via* Edson, Their Majesties arrived in the capital of Alberta, and received official welcomes from the Provincial Government and the City of Edmonton. They were also greeted by 1,200 Cree Indians, who sang the National Anthem in their native tongue. A dinner was tendered by the Provincial Government, after which Their Majesties left for Clover Bar (night).

Prairie Provinces and Ontario Points.—*Saturday, June 3, to Wednesday, June 7*—The Royal Itinerary did not include any more official visits to provincial capitals until the Maritime Provinces were reached. The next five days were largely occupied in travelling, short stops being made at many points, at some of which drives were undertaken; at others, receptions were held at the station. The points covered are listed, as showing the course of the Royal route, and are presented in the order in which the localities were visited. *Saturday, June 3*—Wainwright, Artland, Biggar, Saskatoon, Watrous, Touchwood, and Melville. *Sunday, June 4*—Rivers, East Tower, Winnipeg, Decimal, Redditt, Niddrie, Sioux Lookout, Savant Lake. *Monday, June 5*—Hornepayne, Fire River, Foleyet, Gogama, Laforest, Capreol, Sudbury Junction, Sudbury, and South Parry (night). *Tuesday, June 6*—Zephyr, Toronto, Guelph, Kitchener, Stratford, St. Mary's Junction, Glencoe, Chatham, and Windsor. *Wednesday, June 7*—London, Ingersoll, Woodstock, Brantford (here Their Majesties autographed the historic Bible presented to Her Chapel of the Mohawks by Her Majesty Queen Anne), and Hamilton, where a demonstration of physicial training was given by school children. Visits to St. Catharines and Niagara Falls completed the first portion of Their Majesties' Canadian visit.

Visit to the United States.—Their Majesties entered the United States at Niagara Falls on the evening of *June 7*, and were officially received at the United States end of the bridge by the Secretary of State, the Honourable Cordell Hull. They entrained again for Washington, arriving on the morning of *June 8*, and were received by the President, Franklin D. Roosevelt. The King and Queen visited Mount Vernon and Arlington National Cemetery. At the former point His Majesty laid a wreath on the tomb of George Washington and at the latter placed a wreath upon the grave of the Unknown Soldier. Their Majesties remained in Washington until the night of *June 9* and then proceeded to Red Bank, N.J. On the morning of *June 10*, Their Majesties motored to Fort Hancock, N.J., where they boarded the United States destroyer *Warrington*, which took them to New York. They landed at the Battery and motored to the World's Fair. From New York they motored to Hyde Park, N.Y., where they were the guests of the President until the evening of *June 11*, when they took train for the Eastern Townships and the Maritime Provinces.

Quebec Province.—*Monday, June 12*—Entering Canada from Rouse's Point, N.Y., Their Majesties visited Sherbrooke, Leeds Tank, Joffre, Lévis, St. Charles, L'Islet, Ste. Hélène, Rivière du Loup, and Trois Pistoles.

Fredericton.—*Tuesday, June 13*—On arrival at Newcastle, Their Majesties motored to Fredericton and received addresses from the Provincial Government and the municipality. A luncheon was given by the Lieutenant-Governor and the Government of New Brunswick at the University of New Brunswick, after which Their Majesties entrained for Fairville, a suburb of Saint John. From Saint John, the Royal Train left for Moncton and Cape Tormentine.

Charlottetown.—*Wednesday, June 14*—Arriving on board H.M.C. Ships *Skeena* and *Saguenay*, the Royal Party visited the Province Building, where addresses were received from the Provincial Government and the City of Charlottetown. A luncheon by the Lieutenant-Governor and a reception in Government House gardens completed the functions in Prince Edward Island.

Halifax.—*Thursday, June 15*—The Royal Party landed at Pictou the previous evening, and after visiting New Glasgow and Truro, Their Majesties reached Halifax and received the welcomes of the Province and the municipality. His Majesty unveiled a portrait of His late Majesty King George V and attended a luncheon given by the Government of Nova Scotia at the Nova Scotia Hotel, when His Majesty broadcasted his farewell address to the people of Canada. Her Majesty the Queen also spoke on this broadcast. In the evening Their Majesties, accompanied by a Naval and Air Force escort, left for Newfoundland aboard the R.M.S. *Empress of Britain*.

OTHER PRINCIPAL EVENTS OF THE YEAR.

The Royal Family.—The death of H.R.H. Prince Arthur of Connaught, K.G., K.T., occurred on Sept. 12, 1938. H.M. Queen Maud of Norway died on Nov. 20, 1938.

Visiting Rulers.—The President of the United States visited Canada on Aug. 18, 1938, receiving an honorary degree from Queen's University, Kingston, Ont., and later in the day opening the Thousand Islands International Bridge.

Diplomatic Appointments.—Changes in the personnel of Canadian diplomatic representatives abroad and of British and foreign envoys to Canada, to the end of March, 1939, will be found in Part IV of Chapter III—Constitution and Government, at pp. 72-74.

The Hon. Daniel C. Roper, Envoy Extraordinary and Minister of the United States to Canada, presented his credentials to His Majesty at Ottawa on May 19, 1939.

International Bridges.—Two international bridges were opened during the year: the Thousand Islands International Bridge, between Ivy Lea, Ont., and Collins Landing, N.Y., was dedicated by President Roosevelt and Prime Minister Mackenzie King on Aug. 18, 1938, and the Blue Water International Bridge between Sarnia, Ont., and Port Huron, Mich., by Governor Frank Murphy of Michigan and Premier Mitchell Hepburn of Ontario on Oct. 8, 1938.

Dominion-Provincial Relations.—The Supreme Court of Canada, on Mar. 27, 1939, disallowed the Alberta Limitation of Actions Act.

The Supreme Court of Canada, on Apr. 5, 1939, ruled that Eskimos are "Indians" within the meaning of the B.N.A. Act, thus settling the liability for their care, a matter which had been in dispute between the Dominion Government and the Government of Quebec.

Trade Agreements.—Trade agreements between Canada and the United States and between the United Kingdom and the United States were signed at Washington on Nov. 17, 1938. Particulars of the Canada-United States Agreement will be found at pp. 468-469 of this volume.

Details of minor changes in, and extensions of, trade agreements will be found listed by countries at pp. 460-462 for countries of the British Commonwealth and at pp. 462-469 for foreign countries.

Provincial General Election.—A general election took place in Prince Edward Island on May 18, 1939, when the Liberal Government of Hon. T. A. Campbell was returned to power.

Subsection 3.—Obituary.

1938.—(See also pp. 1114-1116 of the 1938 Year Book.) June 24, Ernest H. Scammel, Ottawa, Ont., Secretary, Department of Pensions and National Health. Hon. E. W. Tobin, Bromptonville, Que., Senator for Victoria. June 28, Hon. Thomas Ahearn, P.C., Ottawa, Ont., former Chairman of the Federal District Commission. July 2, Fred G. McBrien, Toronto, Ont., M.L.A. for Toronto (Parkdale). July 9, Capt. Leander Arthur Demers, Ottawa, Ont., former Dominion Wreck Commissioner. July 26, H. P. Biggar, Worplesdon, Surrey, Eng., Chief Archivist of Canada in Europe. Judge Joseph J. Ryan, Los Angeles, Cal., U.S.A., late County Judge for Portage la Prairie and former M.P. for Marquette. Aug. 7, W. E. Matthews, C.B.E., Montreal, Que., former Chairman of the Federal District Commission. Aug. 13, Hon. F. R. Latchford, Toronto, Ont., Chief Justice of the

Appellate Division of the Supreme Court of Ontario. Aug. 15, Francis Henry Shepherd, Creston, B.C., former M.P. for Nanaimo. Aug. 21, Samuel W. Jacobs, K.C., Montreal, Que., M.P. for Cartier, Que. Aug. 23, Hon. Lindsay C. Gardner, Yarmouth, N.S., Speaker of the Legislature of Nova Scotia. Stephen E. O'Brien, Ottawa, Ont., former Assistant Deputy Minister of Public Works. Sept. 1, David W. Beaubier, Brandon, Man., M.P. for Brandon. Sept. 12, Charles C. Ross, Vancouver, B.C., former Alberta Minister of Lands and Mines. Sept. 23, Major Sir Andrew Macphail, O.B.E., LL.D., M.D., Montreal, Que. Sept. 25, Major-General J. W. Stewart, Vancouver, B.C., Commander of the Canadian Railway Troops in the Great War. Sept. 26, Manning W. Doherty, Toronto, Ont., former Minister of Agriculture for Ontario. Sept. 27, Louis A. Fitzpatrick, Quebec, Que., former Judge of the Court of Sessions of the Peace. Oct. 4, William James Shaughnessy, Montreal, Que., 2nd Baron Shaughnessy. Oct. 5, Hon. Charles Percy Fullerton, K.C., Winnipeg, Man., former Chairman of the Board of Railway Commissioners, and of the Board of Trustees of the Canadian National Railways and former Justice of the Court of Appeal of Manitoba. Oct. 16, Lord Stanley, London, Eng., Dominions Secretary. Nov. 9, Alexander Nugent McPherson, Winnipeg, Man., former County Judge of the Eastern Judicial District of Manitoba. Nov. 13, Hugh H. Rowat, Ottawa, Ont., former Deputy Minister of the Dept. of Interior. Hon. L. A. Letourneau, Quebec, Que., M.L.C. for LaSalle. Nov. 16, Hon. Albert J. Brown, Montreal, Que., Senator for Wellington. Nov. 22, His Honour Harry Anson Lavell, Kingston, Ont., Judge of the County Court of Frontenac. Major-General Hugh H. McLean, Saint John, N.B., former Lieutenant-Governor of New Brunswick and former M.P. for Queens-Sunbury and Royal-Kings. Nov. 24, William James Lovie, Holland, Man., former M.P. for Macdonald, Man. Nov. 28, Hon. John W. Fordham Johnson, Vancouver, B.C., former Lieutenant-Governor of B.C. Nov. 30, Sir John Aird, Toronto, Ont., former President of the Canadian Bank of Commerce. Dec. 1, D. B. Hanna, Toronto, Ont., first President of the Canadian National Railways. Dec. 26, Pierre E. Boivin, Montreal, Que., former M.P. for Shefford. Dec. 27, Gerald H. Brabazon, Ottawa, Ont., former M.P. for Pontiac. Dec. 30, Marcus Hyman, M.A., K.C., Winnipeg, Man., M.L.A., for Winnipeg. Dec. 31, Dr. Robert Nelson Walsh, Montreal, Que., former M.P. for Huntingdon. **1939.**—Jan. 4, Dr. Jules Desrochers, Quebec, Que., former M.P. for Portneuf. Jan. 6, Hon. J. P. B. Casgrain, Montreal, Que., Senator for de Lanaudière. Feb. 21, Hon. James Houston, K.C., Toronto, Ont., Senator for North Bruce. Feb. 23, Brig.-Gen. William B. R. Hepburn, C.M.G., London, Eng., former M.P. for Prince Edward County. Feb. 27, James Warren Rutherford, M.P., Chatham, Ont., M.P. for Kent. Feb. 16, J. D. McLean, Montreal, Que., former Assistant Deputy Minister of Indian Affairs. Mar. 7, Sir Joseph Flavelle, Bart., West Palm Beach, Fla., U.S.A., former Chairman of the Imperial Munitions Board. Hon. Robert Weir, Weldon, Sask., former Minister of Agriculture. Mar. 8, Major-General Sir Henry Pellatt, Kt., C.V.O., V.D., Toronto, Ont. Mar. 14, Hon. George H. Sedgewick, C.M.G., K.C., LL.D., Ottawa, Ont., Chairman of the Tariff Board and former Justice of the Supreme Court of Ontario. Mar. 31, Edmond G. Odette, Toronto, Ont., Commissioner of the Liquor Control Board of Ontario and former M.P. for Essex East. Apr. 3, J. Grove Smith, Ottawa, Ont., former Dominion Fire Commissioner. Hon. Rupert W. Wigmore, Saint John, N.B., former Dominion Minister of Customs and Inland Revenue. Fred Crone, Vancouver, B.C., M.L.A. for Vancouver Centre. Apr. 6, Eric Brown, Ottawa, Ont., Director, National Gallery of Canada. Apr. 17, J. Vital Mallette, Montreal, Que., M.P. for Jacques Cartier. Apr. 18, Ishbel, Marchioness of Aberdeen, Aberdeen, Scotland, Founder of the Victorian Order of Nurses. Apr. 20, Lt.-Col. Andrew T. Thompson, K.C., Ottawa, Ont., former M.P. for Haldimand. May 4, Dr. A. W. Chisholm, Margaree Harbour, N.S., former M.P. for Inverness. May 8, E. F. Drake, Ottawa, Ont., former Director, Dominion Reclamation Service. June 1, Major-General A. C. Caldwell, Ottawa, Ont., former Master-General of the Ordnance. May 17, John Bruce Walker, Winnipeg, Man., Director of European Emigration. June 15, Eccles J. Gott, Amherstburg, Ont., former M.P. for Essex South. June 23, Brig.-Gen. Ernest A. Cruikshank, Ottawa, Ont., Chairman of the Historic Sites and Monuments Board. July 8, Col. George Snider, Hamilton, Ont., former Judge of the County Court of Wentworth. July 9, Dr. A. M. Young, Saskatoon, Sask., M.P. for Saskatoon. July 12, Hon. W. G. Ernst, Bridgewater, N.S., former Dominion Minister of Fisheries. Hon. Fernand Rinfret, Los Angeles, Cal., U.S.A., Secretary of State. July 13, Major-General D. W. B. Spry, O.B.E., V.D., Toronto, Ont., former District Officer Commanding M.D. No. 13.

Section 3.—Extracts from the Canada Gazette—Official Appointments, Commissions, etc.*

Privy Councillors, 1939.—Jan. 23, Norman Alexander McLarty, Esq., B.A., K.C., M.P., Windsor, Ont., James Angus MacKinnon, Esq., M.P., Edmonton Alta.: to be Members of the King's Privy Council for Canada.

Cabinet Ministers, 1939.—Jan. 23, Hon. Norman Alexander McLarty, P.C.: to be Postmaster General. Hon. James Angus MacKinnon, P.C.: to be a Member of the Administration and Minister without portfolio.

New Members of the House of Commons, 1938.—Nov. 8, Peter Bercovitch, elected for Cartier (Island of Montreal), Que. Nov. 14, Hon. R. J. Manion, elected for London, Ont.; Karl K. Homuth, elected for Waterloo South, Ont.; J. E. Matthews, elected for Brandon, Man.

Honorary Aides-de-Camp, 1938.—His Excellency the Governor General has been pleased to make the following appointments, *viz.*: Oct. 1, Commander H. E. Reid, Royal Canadian Navy, Commander-in-Charge, H.M.C. Dockyard, Halifax, N.S., *vice* Commander R. I. Agnew, O.B.E., Royal Canadian Navy. Oct. 14, Capt. V. G. Brodeur, Royal Canadian Navy, Captain-in-Charge, H.M.C. Naval Establishments, Esquimalt, and Commanding Officer, Coast of British Columbia, *vice* Commander C. T. Beard, Royal Canadian Navy.

Official Appointments, 1938.—June 2, Gustave Francq, Esq., Montreal, Que.: to be a Member of the Dominion Council of Health, from June 1, 1938, *vice* Patrick M. Draper, whose tenure of appointment has expired. Lt.-Col. James Learmonth Melville, M.C., E.D.: to be a member of the War Veterans' Allowance Board, with effect from June 2, 1938. June 30, Hon. Horace Harvey, Chief Justice of Alberta: to be Administrator of the Government of the Province of Alberta during the absence of the Lieutenant-Governor of the said Province, from July 3, 1938, to Aug. 8, 1938, both dates inclusive. Aug. 9, Hon. Thibaudeau Rinfret, Puisne Judge of the Supreme Court of Canada: to be Deputy Administrator of the Government of Canada. Aug. 31, Hon. T. A. Crerar, Minister of Mines and Resources: to be Acting Secretary of State during the absence of the Secretary of State. W. Charles Folliott, Esq.: to be a Member of the Canadian Wheat Board in the place and stead of Alexander M. Shaw, effective Sept. 1, 1938. Sept. 14, Hon. W. M. Martin, of the Saskatchewan Court of Appeal: to be Administrator of the Province of Saskatchewan during the absence of the Lieutenant-Governor, Sept. 17 to Oct. 8, inclusive. A. Cyril March, Esq., K.C., Prince Alberta, Sask., to be a Member of the War Veterans' Allowance Board. Dr. J. G. Fitzgerald, Director, School of Hygiene and Connaught Laboratories, Toronto, Ont., to be again a Member of the Dominion Council of Health. Donald Gordon, Esq., Deputy Governor of the Bank of Canada, effective Sept. 15, 1938. Oct. 10, Herbert James Symington, Esq., K.C., Montreal, Que., and Brenton Leo Daly, Esq., Winnipeg, Man.: to be again Directors of the Canadian National Railways for another term to expire Sept. 30, 1941. Nov. 4, J. A. Gregory, Esq., M.L.A., North Battleford, Sask., and Rev. A. D'Eschambault, D.S.T., D.J.C., St. Boniface, Man.: to be Members of the Historic Sites and Monuments Board of Canada; the said Board as now reconstituted to hold office for a period of five years from the date hereof. Nov. 8, William Hugh Masson Wardrope, Esq., Barrister-at-law, Hamilton, Ont.: to be a Member of the Board of Transport Commissioners for Canada and Assistant Chief Commissioner of the Board. Wilfred Hanbury, manufacturer and lumberman, Vancouver, B.C.: to be a Member of the Board of Transport Commissioners for Canada. Nov. 22, Joseph Sirois, Esq., LL.D., Quebec, Que., a Member of the Commission on Dominion-Provincial Relations: to be Chairman of the said Commission, *vice* the Hon. Newton Wesley Rowell, LL.D., resigned. Dec. 2, John Duncan MacLean, Esq., M.D., C.M., LL.D., Ottawa, Ont.: to be a member of the Canadian Farm Loan Board for a further period of five years, to Jan. 1, 1944. Dec. 2, J. Wilfrid Godfrey, Halifax, N.S., barrister-at-law; Capt. the Rev. Alexander Vachon, Quebec, Que., Director of Chemical Research; and Rev. William Eastland Fuller, Campbellton, N.B., a Canon of the Church of England: to be again Governors of the Canadian Broadcasting Corporation for a further term of three years from Nov. 2, 1938. Dec. 20, L. Clare Moyer, Esq., K.C., Ottawa, Ont.: to be Clerk of the Parliaments, Clerk of the Senate, and Master in Chancery of the Dominion of Canada, *vice* Austin Ernest Blount, Esq., C.M.G., superannuated. **1939.**—Jan. 6, Hon. Robert Spelman Robertson, Chief Justice of Ontario: to be Administrator of the Government of the Province of Ontario during the absence of the Lieutenant-Governor of the said Province, from Jan. 19, 1939, to Feb. 11, 1939, both dates inclusive. Jan. 13, M. G. Allmark, Viateur Couture, W. A. Crandall, and R. J. Gibbons, members of the Department of Pensions and National Health: to be Dominion Analysts under Part I of the Food and Drugs Act. Jan. 17, John A. Sullivan, H. Beaulieu, and R. H. McNabb, of the Post Office Department: to represent Canada at the Buenos Aires Congress of the Universal Postal Union. Feb. 28, A. J. Whitmore, Esq., Head of the Western Fisheries Division of the Department of Fisheries, Ottawa, Ont.: to be a Member of the International Pacific Salmon Fisheries Commission. Mar. 3, Hon. Sir Joseph Andrew Chisholm, Chief Justice of Nova Scotia: to be Administrator of the Government of the Province of Nova Scotia during the absence of the Lieutenant-Governor from Mar. 4, 1939, to Mar. 18, 1939. Mar. 14, Mrs. Helen Douglas Smith, Vancouver, B.C.: to be re-appointed a Member of the Dominion Council of Health, to date from June 2, 1939. Mar. 28, Dr. Colvin Ketchum, Yellowknife, N.W.T.: to be a Medical Health Officer and Coroner in and for the Northwest Territories. Apr. 27, Hon. Sir Joseph Andrew Chisholm, Chief Justice of Nova Scotia: to be Administrator of the Government of the Province of Nova Scotia during the absence of the Lieutenant-Governor, from May 1, 1939, to June 1, 1939. May 13, Dr. Harrison F. Lewis, Chief Federal Migratory Bird Officer for the Provinces of Ontario and Quebec, National Parks Bureau, Dept. of Mines and Resources, Ottawa: to be a Member of the Advisory Board on Wild Life Protection. June 23, M. Armand Circe, Dean, Ecole Polytechnique, University of Montreal, Montreal, Que.; M. Beaudry Leman, President, Banque Canadienne Nationale, Place d'Armes, Montreal, Que.; R. J. Tallon, Esq., Secretary Treasurer, Trades and Labour Congress of Canada, Ottawa, Ont.; Dr. R. C. Wallace, Principal, Queen's University, Kingston, Ont.: to be members of the National Research Council for a term of three years expiring Mar. 31, 1942. Hon. Robert Spelman Robertson, Chief Justice of Ontario, to be Administrator of the Government of the Province of Ontario during the absence of the Lieutenant-Governor of Ontario from July 21 to 29, 1939. June 29, Adrien Pouliot, Esq., Civil Engineer, L.Sc., Quebec, Que., Professor of the Faculty of Sciences of Laval University: to be a Governor of the Canadian Broadcasting Corporation for a term ending Nov. 2, 1941, *vice* Monsignor Alexandre Vachon, resigned.

---

* This list is in continuance of that at pp. 1116-1120 of the 1938 Year Book.

Judicial Appointments, 1938.—June 21, Kenneth Lee Crowell, Esq., Barrister-at-law, Bridgetown, N.S.: to be Judge of the County Court of District No. 3, comprising the Counties of Annapolis, Digby, and Yarmouth in the said Province. July 13, Dr. Joseph Henri Riopel, Indian Agent at Resolution, N.W.T.: to be a Justice of the Peace in and for the Northwest Territories with the powers and authorities of two Justices of the Peace. July 20, MacKay Meikle, Esq., District Agent for the Bureau of Northwest Territories Administration at Fort Smith, N.W.T.: to be Sheriff of the Northwest Territories in the place of the late Major-General Sir James H. MacBrien. Arthur Frederick Camsell, Esq., Postmaster at Fort Resolution, N.W.T.: to be a Justice of the Peace in and for the Northwest Territories with the powers and authorities of two Justices of the Peace. Aug. 4, Omer St. Germain, Esq., Barrister-at-law, Morinville, Alta.: to be Stipendiary Magistrate for the Northwest Territories. John Edward Gibben, Esq., Barrister-at-law, Winnipeg, Man.: to be a Stipendiary Magistrate for the Northwest Territories. Arthur Henry Harwood, Postmaster at Waterton Park: to be a Justice of the Peace for Waterton Lakes National Park. Sept. 8, Corporal John Henry Pearson, R.C.M.P., to be a Justice of the Peace in and for the Yukon Territory, with the powers and authorities of two Justices of the Peace. Sept. 21, John Stanley Smiley, Esq., K.C., Amherst, N.S.: to be a Puisne Judge of the Supreme Court of Nova Scotia. Oct. 11, Sergeant Henry A. Larsen, R.C.M.P., Schooner *St. Roch:* to be a Justice of the Peace in and for the Northwest Territories. Oct. 18, Dr. J. A. Urquhart, Fort Smith, N.W.T.: to be a Stipendiary Magistrate, pursuant to the Northwest Territories Act, for the Northwest Territories. Fred. H. Barlow, Esq., K.C., Toronto, Ont., Master of the Supreme Court of Ontario: to be District Judge in Admiralty of the Exchequer Court in and for the Ontario Admiralty District. Hon. Lucien Cannon, a Puisne Judge of the Superior Court for the Province of Quebec: to be District Judge in Admiralty of the Exchequer Court in and for the Admiralty District of the Province of Quebec. Nov. 1, Hon. William Ferdinand Alphonse Turgeon, a Judge of the Court of Appeal for Saskatchewan: to be Chief Justice of the Court of Appeal with the style and title of Chief Justice of Saskatchewan. Percy McCuaig Anderson, Esq., K.C., Regina, Sask.: to be a Judge of His Majesty's Court of King's Bench for Saskatchewan. Nov. 8, Cleeve G. White, Esq., Victoria, B.C., Registrar of the Court of Appeal and Supreme Court: to be Registrar of the Exchequer Court of Canada on its Admiralty side for the Admiralty District of the Province of British Columbia. Dec. 7, Hon. Mr. Justice Charles Patrick McTague, a Judge of the High Court of Justice for Ontario: to be a Justice of the Court of Appeal for Ontario and *ex officio* a Judge of the High Court of Justice for Ontario. James Gerald Kelly, Esq., K.C., Toronto, Ont.: to be a Judge of the High Court of Justice for Ontario. Dec. 20, Robert Spelman Robertson, Esq., K.C., Toronto, Ont.: to be Chief Justice of the Court of Appeal for Ontario with the style and title of Chief Justice of Ontario and *ex officio* a Judge of the High Court of

Justice for Ontario. **1939.** — Jan. 13, John Clifford Reynolds, Esq., K.C., Kingston, Ont.: to be Judge of the County Court for the County of Frontenac, Ont., and also a local Judge of the High Court of Justice for Ontario. John Owen Wilson, Esq., Barrister-at-law, Prince George, B.C.: to be Junior Judge of the County Court for Cariboo, B.C., and also a Local Judge of the Supreme Court of British Columbia. His Honour Herbert Ewen Arden Robertson, Junior Judge of the County Court for Cariboo, B.C.: to be Judge of the said Court, and also a local Judge of the Supreme Court of British Columbia. Apr. 14, His Honour John Charles McIntosh, Junior Judge of the County Court for the County of Nanaimo, B.C.: to be Judge of the said Court and also to be a Local Judge of the Supreme Court of British Columbia. Paul P. Harrison, Esq., K.C., Courtenay, B.C.: to be Junior Judge of the County Court for the County of Nanaimo in the said Province and also to be a Local Judge of the Supreme Court of British Columbia. May 11, Joseph H. Legris, Esq., K.C., Haileybury, Ont.: to be Deputy Judge of the District Court for the Provisional Judicial District of Temiskaming during the illness of His Honour Judge Henry Hartman. May 22, Willie Joseph Williams, Esq., Contractor, Yellowknife, N.W.T.: to be a Justice of the Peace in and for the Northwest Territories with powers and authorities of two Justices of the Peace. May 30, David Livingstone McKeand, Esq., Department of Mines and Resources, Ottawa: to be a Stipendiary Magistrate for the Northwest Territories. June 29, Hon. Thomas C. Davis, K.C., Regina, Sask., Attorney-General of the Province of Saskatchewan: to be a Judge of the Court of Appeal for Saskatchewan and *ex officio* a Judge of His Majesty's Court of King's Bench for Saskatchewan. J. Welsford MacDonald, Esq., K.C., Pictou, N.S.: to be Judge of the County Court of District No. 5 comprising the Counties of Pictou and Cumberland in the said Province.

Commissioners, 1938.—June 20, Eugene McGrath Quirk, Esq., Eastern Representative of the Department of Labour, Montreal, Que.: to be a Commissioner, under the provisions of Part I of the Inquiries Act, to inquire into the dispute at Cornwall, Ont., between certain members of the Canadian Seamen's Union and certain shipping companies and into any matters or circumstances connected therewith. July 26, R. T. Young, Esq., Canadian Trade Commissioner at Mexico City, Mexico: to be a Commissioner to administer oaths and to take and receive affidavits, declarations, and affirmations in Mexico for use in the Supreme and Exchequer Courts of Canada. Sept. 7, Hon. Mr. Justice Henry Hague Davis, a Judge of the Supreme Court of Canada: to be a Commissioner, under Part I of the Inquiries Act, to inquire into the terms of the contract, etc., entered into with the John Inglis Co., Ltd., for the manufacture of Bren machine guns for use of the defence forces of Canada. Oct. 13, N. R. Hoffman, Esq., K.C., Gull Lake, Sask.: to be a Commissioner to investigate charges of political partisanship against Government employees in the Province of Saskatchewan. Oct. 27, J. C. Hossie, Esq., Barrister, Shaunavon, Sask.: to be a Commissioner, pursuant to Part I of the Inquiries Act, to investigate charges of political partisanship against Government employees in the Province of Saskatchewan. Nov. 4, John Forbes MacNeill, Esq., K.C., Senior Advisory Counsel of the Department of Justice: to be a Commissioner to administer oaths and to take and receive affidavits, declarations, and affirmations in Canada for use in the Supreme and Exchequer Courts. Russell M. Paul, Esq., Barrister, Wakaw, Sask.: to be a Commissioner, pursuant to Part I of the Inquiries Act, to investigate charges of political partisanship against Government employees in the Province of Saskatchewan. Nov. 25, S. J. W. Thompson, Esq., K.C., Maple Creek, Sask.: to be a Commissioner, pursuant to Part I of the Inquiries Act, to investigate charges of political partisanship against Government employees in the Province of Saskatchewan. Dec. 7, Ira Layton Holmes, Gordon Scott Howard, and Adam Douglas McCollum, Field Supervisors, Soldier Settlement, Saskatoon: to be Commissioners to take affidavits, oaths, statutory declarations, or solemn affirmations required to be taken under the Soldier Settlement Act. Dec. 22, Hon. Charles Stewart, Ottawa; Brigadier-General Thomas L. Tremblay, Quebec; J. M. Wardle, Esq., Dept. of Mines and Resources, Ottawa; Arthur Dixon, Esq., Dept. of Public Works, Victoria; and J. W. Spencer, Esq., Vancouver: to be members of the Commission to inquire into the engineering, economic, financial, and other aspects of the proposal to construct a highway through British Columbia and Northwest Territories to Alaska. **1939.**—Jan. 6, Leslie Clare Moyer, Esq., D.S.O., K.C., Clerk of the Senate: to be a Commissioner to administer the Oath of Allegiance to persons called to the Senate of Canada as members thereof. Jan. 26, J. W. Thompson, Esq., K.C., Maple Creek, Sask.: to be a Commissioner under Part I of the Inquiries Act, to investigate such charges of political partisanship against Government employees in the Province of Saskatchewan as may be referred to him. Mar. 31, Lt.-Col. L. J. Adjutor Amyot, Manufacturer, Quebec: to be a Member of the National Battlefields Commission and also to be Chairman of the said Commission in the place of Sir George Garneau, resigned. Apr. 4, Patrick John Mulqueen, Esq., Toronto: to be a Commissioner of the Toronto Harbour Commissioners, for a further term of three years, effective from the date hereof. T. Frank Matthews, Esq.: to be a Commissioner of the Toronto Harbour Commissioners for a period of three years, to fill the vacancy caused by the resignation of J. E. Ganong, Esq. June 2, Professor A. M. MacKenzie, University of Toronto: to be sole arbitrator in the dispute between the Canadian Lake Carrier's Association and the Canadian Seamen's Union and to be also a Commissioner to make a full inquiry into the said dispute. June 15, J. S. MacDonald, Esq., First Secretary at the Canadian Legation in Paris, France: to be a Commissioner to administer oaths and to take and receive affidavits, declarations, and affirmations in France for use in the Supreme and Exchequer Courts of Canada. June 23, Hon. Gordon McG. Sloan, Puisne Judge in the Court of Appeal of British Columbia, to be a Commissioner under Part I of the Inquiries Act, to investigate the capture of salmon by trapnets in the Sooke area, B.C., and also to investigate whether purse-seines for the capture of pink salmon and 'late' sockeye salmon should continue in a portion of the gulf of Georgia, B.C. Edward Bannerman Ramsay, Esq., to be again Chief Commissioner of the Board of Grain Commissioners for Canada for a further period of ten years from Aug. 15, 1939. Charles McGill Hamilton, Esq., to be again a Commissioner of the Board of Grain Commissioners for Canada, for a further period of ten years from Aug. 15, 1939. Duncan Alexander McGibbon, Esq., Ph.D., to be again a Commissioner of the Board of Grain Commissioners for Canada, for a further period of ten years from Aug. 15, 1939.

Day of General Thanksgiving.—Monday, Oct. 10, 1938, was appointed by proclamation as a "day of general thanksgiving to Almighty God for the bountiful harvests and other blessings with which Canada has been favoured".

Act of Grace and Mercy.—At the conclusion of the visit of Their Majesties to Canada, the Royal Prerogative of Mercy was exercised in a Proclamation dated June 15, reducing by one month all sentences for offences against the Criminal Code or any other Dominion Statute.

APPENDIX I.

External Trade of Canada in the fiscal year 1938-39.

Preliminary figures of the external trade of Canada for the fiscal year ended Mar. 31, 1939, show a grand total trade of $1,627,998,185, as compared with a figure of $1,883,891,122 in the preceding year, or a decrease of $255,892,937. The decrease in the imports was $140,841,884. Domestic exports decreased by $143,266,364 while foreign exports increased by $28,215,311. Figures by industrial groups are given in the following table, where the figures of imports and exports may be compared with the totals given for previous years in the tables on pp. 502 and 510-511 of this volume.

Imports and Exports of Canada, fiscal year 1939.

Industrial Group.	Imports.
	$
Agricultural and vegetable products	121,266,523
Animals and animal products	24,399,286
Fibres, textiles, and textile products	84,984,145
Wood, wood products, and paper	31,941,864
Iron and its products	154,056,578
Non-ferrous metals and their products	36,254,270
Non-metallic minerals and their products	121,306,624
Chemicals and allied products	34,890,675
Miscellaneous commodities	49,128,069
Total Imports	**658,228,034**
Total Dutiable Imports	369,098,531
Total Free Imports	289,129,503
Duty Collected	89,273,006
	Exports.
	$
Agricultural and vegetable products	182,875,417
Animals and animal products	121,242,053
Fibres, textiles, and textile products	13,250,837
Wood, wood products, and paper	214,488,484
Iron and its products	58,682,214
Non-ferrous metals and their products	272,632,850
Non-metallic minerals and their products	24,578,888
Chemicals and allied products	20,583,506
Miscellaneous commodities	18,627,996
Total Domestic Exports	926,962,245
Total Foreign Exports	42,807,906
Total Exports	**969,770,151**
Grand Total External Trade	**1,627,998,185**

APPENDIX II.

Survey of Production, 1936-37.

Reflecting marked increases in price and volume, a gain of 13 p.c. occurred in the net value of production during 1937, compared with the revised figure for 1936. Eight of the nine main divisions of industry showed appreciable advances over the preceding year, while the net value of agriculture was practically unchanged. Encouraging gains were registered in mining, forestry, construction, and manufactures.

On a provincial basis, increases over 1936 were shown in seven of the nine provinces, the exceptions being Saskatchewan and Prince Edward Island.

1.—Gross and Net Values of Production in Canada, by Industries, 1936[1] and 1937.

Division of Industry.	1936.[1]		1937.		Percentage Change in Net Value 1937 from 1936.	Percentage of Net Value to Total Net Production, 1937.
	Gross.[2]	Net.[2]	Gross.[2]	Net.[2]		
	$	$	$	$	p.c.	p.c.
Agriculture	1,065,966,000	679,341,000	1,039,492,000	678,953,000	− 0·06	22·86
Forestry	400,292,122	231,937,561	494,355,587	284,504,031	+22·7	9·58
Fisheries	51,081,135	34,234,063	51,155,513	34,439,481	+ 0·6	1·16
Trapping	9,214,325	9,214,325	10,477,096	10,477,096	+13·7	0·35
Mining	497,332,721[3]	291,972,359	662,630,976[3]	372,796,027	+27·7	12·55
Electric power	135,865,173	133,561,387	143,546,643	140,963,914	+ 5·6	4·75
Totals, Primary Production	2,159,751,476	1,380,260,695	2,401,657,815	1,522,133,549	+10·3	51·25
Construction	258,040,400	135,851,162	351,874,114	176,029,679	+29·6	5·92
Custom and repair[4]	100,549,000	70,930,000	113,067,000	79,055,000	+11·5	2·66
Manufactures[5]	3,002,403,814	1,289,592,672	3,623,159,500	1,506,624,867	+16·8	50·72
Totals, Secondary Production[6]	3,360,993,214	1,496,373,834	4,088,100,614	1,761,709,546	+17·7	59·30
Grand Totals	**4,862,126,049**	**2,628,419,977**	**5,658,877,071**	**2,970,617,510**	**+13·0**	**100·00**

[1] Revised figures are here given for 1936 which were not available when Chapter VII—Survey of Production—went to press. See also the Bureau's bulletin "Survey of Production in Canada, 1937". [2] See Chapter VII for explanation of gross and net value of production. [3] Gross value comprises industrial mineral production shown in Chapter XII, Table 1, plus the value of ores, etc., of the smelting industry. [4] Custom and repair from special tabulation based on 1930 Census of Merchandising and Service. [5] The item "Manufactures" includes dairy factories, sawmills, pulp and paper mills, etc., which are also included in other headings above. This duplication, amounting in 1936 to a gross of $658,618,641 and a net of $248,214,552, and in 1937 to a gross of $830,881,358 and a net of $313,225,585, is eliminated from the grand total. [6] Secondary production includes the above-mentioned duplication. The percentage of net manufactures, less duplication, to the total net production in 1937 was 40·1 p.c.

2.—Summary Analysis of the Value of Production in Canada, by Provinces, 1936[1] and 1937.

Province.	1936.[1]				1937.			
	Gross Value.	Net Value.			Gross Value.	Net Value.		
		Amount.	Percentage.	Per Capita.[2]		Amount.	Percentage.	Per Capita.[2]
	$	$		$	$	$		$
P.E.I.	21,166,389	12,372,654	0·47	134·50	18,366,455	9,361,792	0·32	100·67
N.S.	154,815,695	89,318,776	3·40	166·33	181,261,518	102,321,783	3·44	188·79
N.B.	116,170,230	62,758,002	2·39	144·27	135,930,088	70,738,543	2·38	160·77
Que.	1,247,023,268	648,790,860	24·68	209·56	1,498,939,161	759,264,651	25·56	242·19
Ont.	2,191,559,179	1,158,885,508	44·09	314·15	2,580,553,917	1,319,991,840	44·44	355·70
Man.	232,926,071	123,128,621	4·68	173·18	301,631,357	175,355,562	5·90	244·57
Sask.	255,200,863	154,936,876	5·90	166·42	176,834,009	74,894,069	2·52	79·76
Alta.	260,635,137	161,864,956	6·16	209·40	309,276,957	205,891,931	6·93	264·64
B.C. and Yukon	382,629,217	216,363,724	8·23	283·20	456,083,609	252,797,339	8·51	330·46
Totals	**4,862,126,049**	**2,628,419,977**	**100·00**	**238·34**	**5,658,877,071**	**2,970,617,510**	**100·00**	**267·14**

[1] Revised since the compilation of the figures shown in Table 2, Chapter VII. [2] Based on estimates of population given on p. 113.

INDEX.

Note.—This Index does not include references to special articles published in previous editions of the Year Book. These are listed on pp. vii to x.

Page.

Aborigines—see "Indians" and "Eskimos".
Abrasives, manufacture of 400
Acadian region 20–2
Accidents, aircraft 713
— fatal industrial 792–3
— motor vehicles 671–2
— on electric railways 658
— on steam railways 653–5
Accounts, public 871–931
Acids, exports and imports 522, 540
— manufacture of 400
Acts of Dominion Legislature 1142–51
— of Parliament administered by Dominion Government Depts 1120–2
Advistory Officer, League of Nations 74
Age distribution of the population 92
Agricultural assistance 817, 821
— co-operation in Canada 824–9
— implements, exports and imports 520, 536
—— manufacture of 398
— irrigation 238–9
— lands 27
—— values of 202, 239
— legislation of 1938 1144–5
— prices 232–7
— production 203–11, 212
—— and farm capital, value of 200–3
— products, exports and imports 512–4, 524–8
— statistics of the 1936 Census 237
Agriculture 187–246
— Canadian, historical background of 187–90
— development of 187
— Dominion Department, organization of 190
— legislation *re* 1144–5
— Provincial Govt. colleges and experimental stations 196
—— Departments of 193–6
— the Government in relation to 190
Aides-de-Camp, appointments of 1163
Aircraft, manufacture of 398, 709–10
— number of licensed 710
Air Force 1082–3
— harbours 708–9
— mail services 708, 735–6
— navigation 702–13
— service, administration of 707–8
—— expenditure *re* 710–11
—— transatlantic 706–7
——use of by R.C.M.P 707
— traffic 711–3
Airway development 703–7
— facilities, modern 703–4
— trans-Canada 703
Alberta Agricultural College 196
— agricultural revenue of 202
— area and description of 5–6, 8
— births 118, 126, 151
— coal occurrences and resources in 348
— deaths 151
— Department of Agriculture 195
—— of Trade and Industry 786
— Dominion lands of 1074
— education—see "Education".
— experimental farms in 196
— Government publications of 1133–4
— hospitals, summary statistics of all 1036–7, 1039
— immigrants to 164
— judicial convictions—see "Judicial".
— lands, classification of 27, 1074
— liabilities of 917
— Lieutenant-Governors and the Ministry 70
— manufactures 380–1, 414–5
— marriages 129, 151
— mineral occurrences in — see individual minerals.
—— production of 323–6

Page.

Alberta, mining laws of 315
— mothers' allowances 839
— motor vehicle regulations 662
— mountain peaks of 9
— police statistics 1070
— population of 79–80, 101, 110–2
— production, survey of 180–6, 1109
— public finance of 910–24
— publications of Government of 1133–4
— representation in the House of Commons 59, 64
—— in the Senate 57, 58
— savings bank 958
— water powers of 360, 361, 362
— wealth of 926–7
— Workmen's Compensation Board 797, 832
Alcohol, consumption of 623, 625
Alcoholic beverages, control and sale of 622–5
—— taken out of bond 894
Alfalfa 205, 212
Aliens, immigration of 162
All-Canadian Congress of Labour 789, 791
Allowances, mothers' 835–40
Aluminium, exports and imports 520, 538
— products, manufacture of 400
Amherst, N.S., gross postal revenue of 731
— manufactures 440
— population of 103
Ammonium sulphate, exports 522
Ammunition, manufacture of 400
Amusement and sporting goods, imports 542
Animal products, consumption of 594–5
—— exports and imports 514–6, 528–30
—— manufacture of 392, 396
—— marketing of 589–93
—— prices of 234–5
Animals, by classes, exports 514
— farm, numbers and values of 215–7, 589
— fur-bearing, on farms 290
Annual register 1142–69
Annuities, Government 1001–2
Anthracite coal—see "Coal".
Apiculture 230
Appalachian region 20–2
Apples, exports 512
— production of 224–5
Appointments, judicial, 1938-39 1165–6
— official, 1938-39 1163–5
Appropriation Acts, 1938-39 1142
Archives, Department of Public 34–6
—— publications of 1127
Arctic drainage basin 13
— islands 13–4, 22
—— geology of 22
Area and density of population of Canada 84–6
— and yield of field crops of Canada 203–11
— and yield of field crops of the world 240–4
— of Canada, and by provinces 1–8
—— land, by tenure 1074
Argentina, agricultural statistics of 240, 241, 242, 244
— trade agreement with 463
Art, works of, imports 542
Asbestos, exports and imports 522, 538
— manufacture of 400
— production of 319, 325, 353–4
Assessment valuations of municipalities 921
Assets, Dominion Government 875–6
— of Provincial Governments 916–8
Assignments under the Bankruptcy Act 1005
Assurance, life 983–97
Atlantic fishing grounds 296
— ports, wheat movement *via* 588
Australia, gold, silver, and coal production of 339, 351
— trade agreement with 461
—— with 494, 501, 551, 552, 553

Page.
Austria, trade agreement with ... 463-4
Automobile accidents ... 671-2
— insurance ... 997, 998, 1000
Automobiles, apparent consumption of ... 664
— exports ... 520, 664
— imports ... 536, 664
— laws and regulations *re* ... 660-2
— manufacture of ... 398
— registration of ... 663-4
— retail trade in ... 614-7
— revenue from ... 668-9
— sales of ... 614-6
— supplies, manufacture of ... 398
— value of, in 1929 and 1933 ... 926
Aviation, accidents ... 713
— administration ... 707-8
— airports and aircraft ... 708-10
— development of ... 703
— employees ... 711
— finances ... 710-1
— military ... 1082-3
— traffic ... 711-3
—— commercial ... 711
— transatlantic air service ... 706-7
— trans-Canada airway ... 703-5

Bacon and hams, exports ... 516
Bags, cotton and jute, manufacture of ... 396
— paper, manufacture of ... 398
Balance of international payments ... 561-5
— sheets of the Dominion, 1934-38 ... 875-6
Bananas, imports ... 524
Bank debits at clearing -house centres ... 950-1
— insolvencies and absorptions ... 942
— of Canada ... 932-5, 1143
—— Act ... 932-4, 1143
—— gold held under earmark by ... 563
—— operations of the ... 934-5
—— relation to Canadian financial system. 934
—— reserves ... 934-5, 940
—— securities guaranteed by Dominion Government ... 904, 906
Bankers' Association, Canadian ... 932
Banking and currency ... 932-69
— business, historical summary of 932, 941-3, 944-5
— commercial ... 941-56
— system of Canada ... 932-5, 941-8
Bankrupt estates, administration of ... 1009
Bankruptcy, Dominion Act ... 1003
Banks, amalgamations and insolvencies ... 942
— assets and liabilities of ... 934-5, 944-7, 952-3
— branches, by provinces ... 955
—— in other countries ... 956
— capital and reserve funds of. 934, 940-1, 946, 952
— chartered ... 939-41, 943-56
—— clearing-house transactions of ... 949-51
—— deposits and loans of ... 948
—— dividend rates paid by ... 954
—— earnings of ... 954
—— legislation *re* ... 939
—— note circulation of ... 939-40
—— profits of ... 954
—— reserves of ... 940-1, 946, 952
— Co-operative People's, in Quebec ... 826
— government and other savings ... 956-8
Barbados, trade with ... 500, 551, 552, 553
Barley, crop distribution of ... 584-5
— exports ... 512
— inspections of ... 586-7
— prices of ... 232, 233, 236
— production in Canada of ... 205, 212
— receipts and shipments of ... 588
— stocks in Canada of ... 213
— world production of ... 242
Barrie, Ont., gross postal revenue of ... 731
— manufactures ... 441
— population of ... 103
Bars and rods, iron, imports ... 534
Beacons, number in use ... 675
Beans, production of ... 205, 212
Beaver skins, number and value taken ... 294

Page.
Beef, consumption of ... 594
— exports ... 516
— stocks in cold storage ... 597
Bee-keeping industry ... 230
Beetroot sugar, production of ... 227-8
Beets, sugar, production of ... 205, 212
Belgium, coal production of ... 351
— trade agreement with ... 464
—— with ... 494, 500, 551, 552, 554
Belleville, Ont., building permits for ... 453
— exports and imports ... 549
— gross postal revenue of ... 731
— manufactures of ... 441
— population of ... 103
Belting, manufacture of ... 396
Benevolence, public health and ... 1027-48
Benevolent institutions, number of ... 1045-6
Bermuda, trade with ... 500, 552, 553
Berries, production of ... 224, 225
Betting, race-track ... 1103-4
Beverages, alcoholic, exports and imports. . 512, 526
— manufactures of ... 396
Bibliography of the history of Canada ... 36-40
Bicycles, manufacture of ... 398
Binder twine, exports and imports ... 516, 532
Birth rates in Canada, by provinces ... 117-8, 151
—— in various countries ... 126-7
Birthplaces of the population ... 96-7
Births, illegitimate ... 125-6
— multiple, in Canada ... 120-1
— sex of ... 117-8
— statistics of ... 116-27
Biscuits, manufacture of ... 396
Bituminous coal—see "Coal".
Blind and deaf-mutes ... 108
— pensions for ... 823-4
Board of Grain Commissioners ... 568
— of Transport Commissioners ... 628-9
——— publications of ... 1123
Boards and planks, exports ... 283, 518
— paper, exports and imports ... 518, 534
Boiler insurance ... 998, 1000
Boilers and engines, imports ... 536
— manufacture of ... 398
Bolivia, trade agreement with ... 464
Bond yields, index numbers of ... 870
Bonds, sales of Canadian ... 964-6
Bookbinding industry ... 398, 402-4, 408
Books and printed matter, exports and imports ... 518, 534
— manufacture of ... 398
Boot and shoe industry ... 396
Boots and shoes, leather, imports ... 528
——— rubber, exports ... 512
Boundaries of Canada ... 1
Boundary, International, length of ... xxxvii
Bounties, fishing ... 299
— on production of commodities ... 598
——— expenditure *re* ... 598
Boxes, manufacture of ... 398
Bradstreet, statistics of commercial failures 1003-5
Bran, shorts and middlings, exports ... 512
Brandon, Man., building permits for ... 453
— exports and imports ... 550
— gross postal revenue of ... 732
— population of ... 103
Brantford, Ont., building permits for ... 453
— exports and imports ... 549
— gross postal revenue of ... 731
— manufactures ... 441
— population of ... 102
Brass products, exports and imports ... 520, 538
— manufacture of ... 400
Brazil, trade agreement with ... 464
Bread, manufacture of ... 391, 396
Breakwaters, administration of ... 1084
Breweries ... 396
— excise licences ... 893
Brick and tile, production of ... 320, 325-6, 355
— imports ... 538
— sand-lime, manufacture of ... 400
Bridges, international, opening of ... 1161
Britain—see "United Kingdom".

PAGE.
British capital invested in Canada........ 928–31
British Columbia, Dept. of Agriculture.... 195–6
——— experiments in agriculture.......... 195–6
—— area and description of.............. 6, 8
—— births.........................118, 126, 151
—— deaths.............................. 151
—— Department of Labour................ 786
—— education—see "Education".
—— employment in...................... 802
—— forest resources of.................. 252
—— Government publications of.......... 1134–5
—— hospitals, summary statistics of all 1036–7, 1039
—— judicial convictions—see "Judicial".
—— lands, classification of...............27, 1074
—— Lieutenant-Governors and the Ministry 71
—— manufactures......................380–1, 416
—— marriages.........................129, 151
—— mineral occurrences in—see individual minerals.
——— production of...................... 323–6
—— mining laws of...................... 316
—— mothers' allowances................. 839–40
—— motor vehicle regulations............ 662
—— mountain peaks of................... 10
—— police statistics.................... 1070
—— population of.....................79–80, 101
—— production, survey of.........180, 182–4, 1169
—— public finance of.................... 910–24
—— representation, House of Commons...59, 64–5
——— in the Senate...................... 57, 58
—— water powers of................360, 361, 362
—— wealth of........................... 927
—— Workmen's Compensation Board.....797, 832
— East Africa, trade with.......501, 551, 552, 553
— Empire, imports from........490, 501, 551, 552
—— exports to......................490, 501, 553
—— trade with.......489–90, 501, 551, 552, 553
— Govt., diplomatic representation....... 72–3
— Guiana, trade with...........500, 551, 552, 553
— India, trade with......494, 501, 551, 552, 553
— preferential tariff.................... 459–62
— Royal Commissions concerned with Canada.......... 1141
— South Africa, trade with. 494, 501, 551, 552, 553
— Straits Settlements, trade with 494, 501, 551–3, 555
— West Indies, trade agreement with..... 462
Broadcasting Corporation................ 725–9
Brockville, Ont., exports and imports..... 549
— gross postal revenue of............... 731
— manufactures......................... 441
— population of........................ 103
Bronze, monetary use of................. 936
Brooms, manufacture of.................. 400
Brushes, manufacture of................. 400
Buckwheat, production of................205, 212
Building materials, manufacture of........ 404
— permits, value of..................... 452–5
— trades, wages in...................... 448
Bullion, exports.........................504, 520
— and coinage issued.................... 937
Buoys, number in use.................... 675
Bureau of Statistics, Dominion........... 1106–20
—— publications of the.................. 1108–20
Bureaus of Labour, provincial............ 782–6
Burglary insurance..................997, 998, 1000
Business colleges........................ 1019
— failures.............................. 1003–9
— machinery, exports and imports........520, 536
— papers, circulation of................. 766–70
— physical volume of.................... 1151
— profits war tax, total receipts from...... 886
Butter- and cheese-making industry..221, 392, 396
Butter, consumption of...................221, 595
— exports and imports...................516, 530
— production of......................... 223
— stocks in cold storage................. 597
Buttons, manufacture of.................. 400

Cabinet, Members of Dominion...........52, 1163
Cablegrams.............................. 714
Cables, submarine telegraph.............. 715

PAGE.
Calgary, Alta., building permits for....... 454
— exports and imports.................... 550
— gross postal revenue of................ 732
— live stock marketed at................. 590
— manufactures........................... 442
— population of.......................... 102
Calves, marketed......................... 592
—— prices of............................. 234–5
Canada, aggregate public debt of.......... 871–2
— area, land and water................... 8
— chronological history of............... 40–9
— climate of............................. 32
— constitution and government of......... 50–77
— *Gazette*, extracts from................ 1163–7
— geographical description of............ 1–14
— Grain Act.............................. 568
—-Irish Free State trade agreement....... 461
— land area of.........................27, 1074
— monetary system of..................... 932–4
— physical characteristics of............. 1–25
— political subdivisions of............... 1–14
— resources of, lands, scenic, and game.... 26–32
— Shipping Act.........................673, 1150
—-South Africa trade agreement, Imp. Conference, 1932.................. 462
—-Southern Rhodesia trade agreement, Imp. Conference, 1932............... 462
— Temperance Act......................... 1097
— trade, external......................... 456–565
—— internal.............................. 566–625
— wealth and income of................... 924–31
Canadian Broadcasting Corporation........ 725–9
— exchange, recent movements in.......... 967–8
— Farm Loan Board........................ 191–2
— fishing grounds......................... 296
— Forestry Association.................... 266–7
— Government Merchant Marine............. 688
— national parks and reserves............ 29–31
—— Railways...............636, 639, 640–9, 651
——— capital revision of.................. 644–6
——— consolidation and organization of.. 642
——— finances of......................... 640–9
——— funds received and expended........ 647–8
——— investment in....................... 636–7
——— loans by Dominion Government to. 641
——— mileage..........................636, 651
——— operating finances of............... 642–3
——— train traffic statistics............. 651–2
—— Steamships........................... 688
—— telegraphs........................... 715
— Northern Railway....................631, 642
— Pacific Railway.............631, 636, 639, 641
—— irrigation projects................... 238
—— telegraphs............................ 715
— Pension Commission..................... 1090
— preference on imports from Empire countries............................ 459–62
— railways............................... 626–60
—— expenditure *re*...................... 636–8
— Red Cross Society...................... 1047–8
— Shield, physiography.................11, 16–9
— shipping registry...................... 673–4
— Wheat Board............................ 569
——— Act................................. 572–4
Canal, Panama............................ 698–9
Canals, Canadian systems................. 676–7
— expenditure and revenue *re*............ 684–6
— traffic of............................. 695–9
Capital, farm............................ 202
— invested in Canada, British and foreign. 928–31
—— in fisheries.......................... 304–5
—— in manufactures, summary by provinces...........380–1, 396–7, 410–6, 418–9
——— by industries and groups........... 396–401
—— in mining.......................327–8, 330–3
— movements............................. 562
— of chartered banks..................... 944
— punishment............................. 1052–3
Caps and hats, manufacture of............ 398
Cargo, water-borne....................... 700–1
Carpets, manufacture of.................. 396
— wool, imports.......................... 532
Carriages, manufacture of................ 398

PAGE.
Castings and forgings, imports............ 534
— manufacture of........................ 398
Casualties, shipping....................... 682
Catholic population........................ 94–6
— Workers Federation of Canada......... 789
Cattle, exports............................. 514
— marketing of............................. 591–2
— numbers, etc., in Canada............... 215–6
—— in world............................... 245–6
— prices of................................. 234–5
Cellulose products, imports............... 540
Cement, manufacture of......320, 326, 355–6, 400
Census of agriculture...................... 237
— statistics of employment and unemployment................................. 809–12
— year 1931, earnings in.................. 849
Central electric stations.................. 363–6
Centres of population...................... 84
Cereal foods, exports...................... 512
Cereals, production of..................... 203–11
— world production of.................... 239–44
Ceylon, trade with........494, 501, 551, 552, 553
Chain stores................................ 612–4
Charitable and benevolent institutions..... 1045–6
Charlottetown, P.E.I., building permits for 453
— gross postal revenue of................. 731
— manufactures............................ 440
— population of........................... 103
— shipping................................. 692
Chartered banks, legislation *re*............ 939–40
Charters of incorporation granted 1095
Chatham, Ont., building permits for...... 453
— exports and imports.................... 549
— gross postal revenue of................. 731
— manufactures............................ 441
— population of........................... 103
Cheese, consumption of..................221, 595
— exports and imports...................516, 530
— factories................................ 396
— production of.........................221, 223
— stocks in cold storage.................. 597
Chemical products, exports and imports...522, 540
—— manufacture of......................396, 400
Cherries, production of..................225, 226
Child-caring institutions.................. 1045–6
China, trade with...............501, 551, 552, 554
Chinaware, imports........................ 538
Chinese immigration....................... 169–71
Chronology, 1497–1939.................... 40–9
Cigars and cigarettes, consumption of...... 894
—— excise tariff........................... 893
—— manufacture of......................391, 396
Cinematograph films, exports and imports.522, 542
Circulation of bank and Dominion notes... 937–40
— of French language publications......... 773
— of magazines............................ 765
— of newspapers, daily.................... 759–60
——— weekly and semi-weekly.......... 761–4
— of silver, nickel, and bronze coin........ 936
Cities, bank clearings of................... 949–50
—— debits of.............................. 950–1
— births in................................ 118–9
— building permits for.................... 453–4
— deaths in................................ 138–40
— exports and imports.................... 549–50
— finances of.............................. 923–4
— gross postal revenue of................. 731–3
— infantile mortality in................... 144–5
— manufactures............................ 439–42
— populations of.......................... 102–7
Citizenship and naturalization............. 97–8
Civil aviation.............................. 702–13
— Service Act..........................1099, 1145
—— Commission........................... 1099
——— publications of..................... 1123
—— personnel of.........................1099–1103
Clay products, exports and imports........522, 538
—— production of..........320, 322, 325–6, 355–7
Clearing-house transactions............... 949–51
Clerks, female, minimum wages of........ 806–7
Clocks and watches, imports.............. 538
Clothing, exports and imports........516, 530, 532
— family expenditures on, by income groups 865

PAGE.
Clothing, index numbers of prices of....... 860–1
— manufacture of.......................396, 398
Clover and hay, production of........204, 205, 212
Coal, bounty on........................... 598
— consumption of.......................... 349–50
— exports and imports...........349–50, 522, 538
— mining industry......................329, 332
— occurrence, by provinces..............347, 348
— prices of................................ 348
— production of........................319, 347–51
— resources of Canada.................... 347
— tar distillation.......................... 400
— world production of.................... 351
Coast radio stations....................... 721–3
Coasting trade..........................691, 694
— vessels, entered and cleared............ 694
Cobalt ore, production of................319, 334
Cobourg, Ont., exports and imports....... 549
— gross postal revenue of................. 731
— manufactures............................ 441
— population of........................... 104
— shipping................................. 692
Cocoa and chocolate, imports............. 526
— manufacture of.......................... 396
Codfish, exports........................... 514
— production of.........................302, 303
Coffee, imports............................ 526
— manufacture of.......................... 396
Coffins and caskets, manufacture of........ 398
Coin and bullion, exports and imports.....504, 520
——— issued................................ 937
— circulation of............................ 936
Coinage at Royal Canadian Mint.......... 936
Coke, exports and imports...............522, 538
— manufacture of.......................395, 400
Cold-storage stocks....................... 596–7
—— warehouses, number and capacity of.. 596
Colleges—see "Education".
— agricultural............................. 196
Colombia, trade agreement with.......... 464
Colonization activities.................... 174
Combinations in restraint of trade, legislation *re*.............................. 834–5
Combines Investigation Act............... 835
Commerce—see "Trade".
Commercial banking....................... 941–56
— failures.................................. 1003–9
— Intelligence Service..................... 470–2
—— Journal................................ 470
Commissioner, British High............... 72–3
— High, for Canada....................... 72–3
Commissioners, appointments of........... 1166–7
— Board of Grain.......................... 568
——— Transport............................ 628–9
— Canadian trade.......................... 470–2
Commissions, Reports of Royal........... 1135–41
Commodities hauled as freight on steam railways.................................. 652–3
— wholesale prices of..................... 850–8
Commons, House of....................... 58–65
—— members of........................60–5, 1163
—— representation in..................... 59–65
Communications, transportation and...... 626–773
Companies, fire insurance................. 974–8
— incorporations of....................... 1095
— life insurance........................... 985
— railway.................................. 630–2
— small loans.............................. 963–4
— steam railway, earnings of.............. 636–7
— trust and loan........................... 959–64
Compensation, workmen's..............793–7, 832
Condensed milk, manufacture of..........223, 396
Confectionery, manufacture of............. 396
Congress of Labour, All-Canadian.........789, 791
Conjugal condition of population.......... 91
Consolidated Fund, expenditure........... 878–83
—— receipts..........................877–8, 883–5
Constitution and Government of Canada.. 50–77
Construction.............................. 443–55
— building permits........................ 452–5
— contracts awarded...................... 451–2
— Dominion Housing Act.............443–5, 1146–7
— employment in.......................455, 808–9
— Government Home Improvement Plan.. 446

Page.
Construction, industrial statistics of....... 447–50
— National Housing Act.................. 443–5
Consumers' co-operation................. 825
Containers, exports and imports...........522, 542
Control of spirituous liquors............... 622–5
Convictions for various offences........... 1050–1
Convicts, number, etc..................... 1070–3
Cooperage, manufacture of................ 398
Co-operation, agricultural, in Canada...... 826–9
— consumers'.......................... 825
— producers'.......................... 826–9
Co-operative credit in Quebec.............826, 958
— movement in Canada.................. 824–9
Copper, bounty on...................... 598
— exports and imports..................520, 538
— manufacture of....................... 400
— occurrence, by provinces............... 334–5
— production of........................319, 335
— world production of.................. 335
Copyrights, trade marks, etc............. 598–601
Cordage, manufacture of................. 398
Cordilleran region........................ 9, 24–5
Corn, imports.......................... 528
— inspection of........................ 586–7
— production of........................205, 212
— world production of..................243, 244
Corporation dividends.................. 966
Corrective and reformative institutions... 1046–7
Corsets, manufacture of.................. 398
Cost of living, expenditures by income groups.......... 865
——— wage-earners, index numbers of..... 866
Costa Rica, trade agreement with......... 464
Cotton products, exports and imports......516, 530
—— manufacture of.....................393, 398
— raw, imports......................... 530
— seed oil, imports..................... 526
— yarn and cloth, manufacture of.........393, 398
Counties, area and population of........... 85–6
County municipalities.................... 919
Cows, milk, number and value of.......... 215–7
Credit, co-operative in Quebec............826, 958
Criminal and judicial statistics............ 1049–73
—— breach of traffic regulations........... 1064–5
—— charges, convictions and acquittals.... 1059
—— classifications of persons convicted.... 1060
—— death sentences..................... 1052–3
—— drunkenness........................ 1062–3
—— juvenile delinquency................ 1066–9
—— offences against liquor laws........... 1063–4
—— population of penitentiaries........... 1071
—— summary convictions................ 1061–6
Crop-reporting service.................. 196–7
Crops, cereals and potatoes, in chief countries.......... 240–4
— distribution of wheat and oat.........214, 584–5
— field, etc., area, yield, and value...203–4, 205–11
— grain, of Prairie Provinces...........209–11, 212
— root and fodder, area, yield and value.. 205–11
Crown Lands—see "Public Lands".
Cuba, trade with....................500, 552, 554
Currants, imports...................... 524
Currency and banking.................... 932–69
— Canadian............................ 936
— legislation *re*......................... 939–40
Customs and Excise, Dept. of—see "National Revenue".
— tariffs, development of................ 456–69
Cutlery and hardware, exports and imports.520, 536
Cyanamid, exports...................... 522
Czechoslovakia, trade agreement with.... 464

Dairy production....................... 220–4
Deaths and death rates, by provinces. .135, 139–40
— by cause............................ 135–6
— by place of residence.................. 138
— by sex.............................. 133
— infantile and maternal................. 141–9
—— in various cities..................... 144–5
—— in various countries.................. 146
— maternal, by age and cause............ 147–9

Page.
Deaths, of public men.................... 1161–3
— rates in various countries.............. 140
— violent............................. 136–8
Debt, municipal......................... 921–2
— net................................. 900–1
— provincial bonded..................... 916
— public...........................871–2, 898–906
—— assets held against.................. 900–1
—— charges............................878, 881
—— funded........................898–9, 901–2
—— interest on......................... 900–2
Defectives, mental...................... 1044–5
—— hospitals for........................ 1044–5
Defence, national....................... 1078–83
Denmark, exports to.....................500, 554
— imports from...................500, 551, 552
— trade agreement with.................. 464
Density of population.................... 84–8
Deportation of immigrants............... 167–8
Deposits, bank...................934, 944, 947–8
—— classification of, by size.............. 948
Diamond dust or bort, imports............ 540
Diamonds, unset, imports................. 540
Diplomatic appointments................72–4, 1161
— representation abroad................. 73–5
—— in Canada.......................... 75
— representatives within the Empire...... 72–3
Disbursements, Dominion................ 878–85
Disputes, industrial..................... 798–800
Distances, table of.................*facing page* vii
Distillation, licences, fees, etc............ 893
Distilleries, production of................ 396
Distribution of grain crop..............214, 584–5
Districts, electoral....................... 60–5
Dividend payments...................... 966
Dividends, tax on....................... 889–90
Divorces............................... 130–1
Docks, graving.......................... 679
Dominion and Provincial Departments of Agriculture.........187, 193–6
—— lands, classification of...............27, 1074
— Bureau of Statistics, publications of the 1108–20
— Departments, publications of.......... 1123–8
— Experimental Farms and Stations...... 196
— finance............................. 873–906
— Forest Service........................ 267
— franchise............................ 65
— Fuel Board........................... 348
— Housing Act...................... 443–5, 1146–7
— legislation.......................... 1142–51
— Marketing Board...................... 193
— ministries........................... 51–2
— notes, circulation of.................. 937–9
— Parliaments.......................... 50–65
— public lands......................... 1075–7
—— revenue from....................... 878
— relations with provinces............... 1161
— Royal Commissions.................... 1135–7
— steamers, receipts of.................686, 689
— Trade and Industry Commission....... 1105
Drainage basins, description of........... 13
Drayton-Acworth report.................. 632
Dried fruits, imports..................... 524
Drought relief........................... 817
Drugs and medicinal preparations, exports and imports.........522, 540
Drydocks, number, cost, etc.............. 679
Dun, statistics of commercial failures...... 1003–5
Duties, customs, on exports and imports... 459–69
—— average rates....................... 508
Dwellings and households................ 109–10
Dyes, analine and coal tar, imports........ 540

Earnings of employees in manufactures.... 426–30
Economic and financial year, 1938......... 1151–5
— geology of Canada..................... 25
Edmonton, Alta., building permits for..... 454
— College of Agriculture................. 196
— exports and imports................... 550
— gross postal revenue of................. 732
— live stock marketed at................. 590
— manufactures......................... 442

PAGE.
Edmonton, population of ... 102
Education ... 1010–26
— adult ... 1011–2
— attendance ... 108, 1010–1
— business colleges ... 1019
— elementary ... 1019
— enrolment ... 1013
— higher ... 1019–23
— Indian ... 1086–7
— libraries ... 1023–5
— museums ... 1025–6
— private schools ... 1019
— provincially-controlled schools ... 1014–8
— pupils, age distribution of ... 1015
— salaries ... 1017
— secondary ... 1019
— scientific research ... 1023
— technical ... 1015–7
— universities, degrees granted ... 1020–3
Educational equipment, imports ... 542
Eggs, exports and imports ... 516, 530
— production and consumption of ... 219–20
— stocks in cold storage ... 597
— value of ... 220
Elections, Dominion ... 59–65
—— dates of ... 54–5
—— votes polled ... 60–5
— provincial ... 1161
Electoral districts ... 60–5
Electric energy exported ... 366
—— generated in central electric stations ... 365
—— used in pulp and paper industry ... 362
— light and power plants, number of ... 364
—— inspection, Dominion receipts from ... 602
— railways—see "Railways".
Electrical apparatus, exports and imports ... 522, 538
—— manufacture of ... 395, 400
Electricity and gas inspection ... 602–3
Elevations of lakes ... 12
— of places ... *facing page* 11
Elevators, grain, number and capacity of ... 585–6
— operating revenues and expenditures of ... 687
Emigration from Canada ... 172–3
Empire, British, trade with 488–90, 501, 551, 552, 553
—— trade preferences in ... 459–62
Employees, by sex, in manufactures 396–401, 422, 423
Employers' liability ... 793
Employment and unemployment ... 800–21
—— statistics, census 1931 ... 809
— as reported by employers ... 803–9
— bureaus, legislation *re* ... 800–1
— by economic areas ... 805–6
— by industries ... 808–9
— Commission, National ... 446
— in agriculture ... 776–8
— in central electric stations ... 364
— in construction industries ... 448–9, 455, 808–9
— in fisheries ... 306
— in leading cities ... 806–7
— in manufactures 379, 380–3, 385, 396–401, 419–26, 808–9
—— by industries ... 396–401
—— by provinces ... 380, 410–6
— in mining ... 328, 330–3, 808–9
— in trade ... 808–9
— in woods operations ... 272, 808–9
— Offices Co-ordination Act ... 779, 800
— on electric railways ... 656–7
— on steam railways ... 638
— Service Council ... 801
—— of Canada ... 800–1
Engines and boilers, imports ... 536
—— manufacture of ... 398
Engraving industry ... 398
Equipment, household and personal, imports ... 542
Ermine skins, number and value taken ... 294
Eskimos ... 1088
Estonia, trade agreement with ... 465
Events of the year, principal ... 1151–61
Exchange, foreign ... 967–9

PAGE.
Excise licences issued ... 893
— revenue ... 893
— tariff ... 892
— taxes, receipts from ... 893
— War taxes, receipts from ... 886–91
Expenditures, Dominion ... 878–83
—— per head of population ... 885
— family, by income groups ... 865
— municipal ... 923–4
— provincial ... 908, 910–11, 914–5
—— per head of population ... 911
Experimental farms and stations ... 196
Explosives, manufacture of ... 400
Export trade, analysis of ... 486–8
— valuations ... 497–9, 502, 512–23
Exports, bullion ... 504, 520
— by continents ... 481, 493, 500–1
— by countries ... 484–5, 494, 500–1, 553–4
— by degree of manufacture ... 500–1
— by origin ... 547
— by ports ... 549–50
— by purpose ... 548
— duties collected on ... 505
— of Canadian and foreign produce ... 502
— of non-monetary gold ... 476
— of principal commodities ... 498–9
— ratio to imports ... 503
— to principal countries ... 494
— *via* the United States ... 492, 555
— wholesale price index numbers of ... 859
Express companies, earnings and business of. 659–60
—— history of ... 658
—— mileage of ... 659
—— operating expenses of ... 659
—— operations of ... 658–9
External trade, historical sketch of ... 456–9
—— statistics ... 472–559
Extracts from the *Canada Gazette* ... 1163–67

Fabrics, imports ... 530, 532
Factory legislation ... 830–4
— trades, wages in ... 841, 842, 843–7
Failures, commercial ... 1003–9
Fair Wages and Hours of Labour Act ... 781
—— Branch ... 780–1
Family characteristics at progressive income levels ... 863
— living expenditures ... 862–5
Farm capital ... 200–3
— expenditures ... 237
— help, wages ... 230–2
— implements, exports and imports ... 520, 536
—— manufacture of ... 398
— lands, value of ... 202, 237, 239
— Loan Board, Canadian ... 191–2
— loans, approved ... 192
— operators, occupation of part-time ... 237
— origin, exports and imports of goods of ... 546–7
— papers, circulation of ... 765–6
— placements ... 816
— tools, exports and imports ... 520, 536
Farmers' business organizations, 1937 ... 829
Farms, number and area of ... 237
— experimental ... 196
Fatal accidents ... 654–5, 658, 671–2
—— industrial ... 792–3
—— motor vehicle ... 671–2
Federation, Catholic Workers of Canada ... 789
— of Labour, American ... 790
Females, convictions of ... 1059
— minimum wages for ... 843–6
Fertility rates of married women ... 120
Fertilizers, exports and imports ... 522, 540
— manufacture of ... 400
Fibres and textiles, exports and imports ... 516, 530
Field crops, area, yield, etc ... 203–15
Films, exports and imports ... 522, 542
Finance Department, publications of the ... 1123
— Dominion ... 873–906
— municipal ... 918–24
— provincial ... 907–18
— and taxation, legislation *re* ... 1142–4

PAGE.
Financial papers, circulation of 765
Fines and forfeitures, Dominion receipts 878
Finishing trades 393
Finland, trade agreement with 465
Fire brick, production of 320, 326
— clay, production of 320, 326
— insurance 971–83
— losses, in Canadian forests 284–5
— wood, production of 272
Fires, forest, protection from 265–7
Fish culture 296, 297
— curing industry 304–6, 392, 396
—— plants 304, 305–6
— exports and imports 307–8, 514, 528
— hatcheries 297
Fisheries, capital invested in 304–5
— conservation 296, 297
— Dominion expenditure *re* 878
—— revenue from 878
— early 296
— Government bounties (Halifax Award) 299
—— in relation to 296–9
— indexes of production 303
— international problems of the 298–9
— manufacturing establishments 304–6
— modern industry 300–8
— production of 300–4
— scientific research *re* 297, 298
— trade 307–8
Fishing grounds, Canadian, the 296
— lines, imports 532
Flax products, imports 530
— production of 200, 201, 229
Flaxseed, crop distribution 584–5
— imports 528
— inspections of 586–7
— prices of 232, 233
— production of 205, 212
— receipts and shipments of 588
— stocks in storage 213
Floriculture 226
Flour, exports and imports 245, 512, 583
— milling industry 391
—— summary statistics of 396
— prices of 233
— production of 391, 396
Fodders, production of 205–11
Fog alarms, number of 675
Food, exports and imports 512, 524
— family expenditures on, by income groups 865
— index numbers of prices of 860–1
— manufacture of 396, 402
— stocks in cold storage 597
Foreign-born population, citizenship of 97–8
— capital invested in Canada 928–31
— countries, trade with 491–2
— currencies, Canadian life insurance in 994–6
— exchange 967–9
— exports 502
Forest administration 263–5
— conservation 265–7
— depletion and increment 284–6
— fire protection 265–7
— growth, main types of 247–50
—— important tree species of 251
— industries, other 284
— insects, control of noxious 254–63
— products, exports and imports 518, 532, 534
—— laboratories 268–70
— regions 247–50
— reserves and parks 252
— resources 251–3
— Service, Dominion 267
— stand, accessible, estimate of 252–3
— utilization 271–86
Forestry, scientific 267–71
Forests, lumber production of 281–3
— woods operations in 271–3
Forfeitures, Dominion receipts from 878
Forgings and castings, imports 534
Fort William, Ont., building permits for 453

PAGE
Fort William, Ont., exports and imports 549
— grain shipments at 587
— gross postal revenue of 732
— manufactures 441
— population of 102
— shipping of 692
Fox farms, number of 290
— skins, number and value taken 294
France, coal production of 351
— exports to 494, 500, 554
— imports from 494, 500, 552
— trade treaty with 465
Franchise, the Dominion 65
Franklin district, area of 8
Fraternal societies, insurance business of 990–3
Fredericton, N.B., building permits for 453
— exports and imports 549
— gross postal revenue of 732
— manufactures 440
— population of 103
Free goods, imports 544
Freight, commodities hauled as, on steam railways 652–3
French language periodicals, number and circulation of 773
Fruit and vegetable canneries 391, 396
— exports and imports 512, 524
— farming 224–6
Fuel control 348
— exports and imports 349, 522, 538, 540
— family expenditures on, by income groups 865
— index numbers of prices of 860–1
— used in manufacturing 435–8
Funded debt of Canada 898–9, 901–2
Fur dressing industry 396
— farming 289–92
— pelts, purchased 292
— production 292–5
— resources 287–95
—— conservation of 288–9
— trade 287–8, 295
—— history of 287
—— modern industry 287
Furnishings, men's, industry 396
Furniture, imports 536
— manufacture of 398
Furs, exports and imports 295, 514, 528
— values of 292–4

Gainfully employed in Canada 110, 774–8
— occupied, by groups and economic areas 776–8
Galt, Ont., building permits for 453
— exports and imports 549
— gross postal revenue of 732
— manufactures 441
— population of 103
Game and scenery, resources of 26–32
Gaol sentences 1052–3
Garment manufacture 396, 398
Gas industry, illuminating and fuel 400
— inspection, revenue from 878
— natural, production of 319, 352
— sold, by kinds 603
Gasoline, consumption of 670
— imports 540
— sales of, by provinces 670
— tax, revenue from, by provinces 669, 909
Geographic Board of Canada, publications of 1125
Geographical features of Canada 1–14
Geological Survey of Canada 14
Geology of Canada 14–25
Germany, gold, silver, and coal production of 339, 351
— trade agreement with 465, 466
Glace Bay, N.S., gross postal revenue of 731
— population of 103
Glass and glassware, imports 540
—— manufacture of 400
— plate, imports 540
—— insurance 997, 998, 1000
Gloves and mitts, imports 528, 532
—— manufacture of 398

PAGE.

Gold bullion, movement of, 1868–1938..... 504
— exports of in trade statistics..........474–6, 520
— held under earmark by Bank of Canada. 563
— monetary use of..........................936, 937
— occurrence, by provinces................ 336–7
— production of..........................319, 336–9
— trade in coin and bullion................ 504
— treatment of in trade statistics.......... 474–6
— world production of..................... 338–9
Government annuities...................779, 1001–2
— control over transportation, etc......... 627–9
— home improvement plan................ 446
— legislation, Dominion.................. 1142–51
— local, in Canada........................ 50
— of Canada, constitution and............. 50–77
— of provinces...........................50, 67–71
— savings banks.......................... 956–8
Governors General of Canada, appointment of.. 51
Grace and Mercy, Act of.................. 1167
Grain Commissioners, Board of........... 568
— crops of Prairie Provinces...........209–11, 212
—— value and yield of.................205–11, 212
—— world statistics of.................... 239–44
— distribution of.......................214, 584–5
— elevators, number of, etc............... 585–6
— exports and imports...................512, 524
— for distillation, quantity of............ 893
— hay, production of....................205, 212
— inspection of........................... 586–7
— movement of, by ports................. 587
— prices of............................232–3, 236
— receipts of............................. 588
— shipments of........................... 587–8
— stocks in store......................... 212–3
— trade.................................. 566–88
Grand Trunk Pacific Railway............631, 642
—— Railway.............................630, 642
Grants-in-aid............................. 813–4
Grapefruit, imports....................... 524
Grapes, imports........................... 524
— production of.........................225, 226
Graphite, production of.................319, 325
Gravel and sand, production of....320, 326, 356–7
Graving docks of Dominion Government.. 679
—— subsidized............................ 679
Grease, exports and imports.............516, 530
Great Britain—see "United Kingdom".
—— Lakes, area, elevation, and depth of 12
—— Plains region, physiography of the.... 23
Greece, trade with......................552, 554
Grist-mills 391
Guaranteed securities, Dominion.......... 904–6
Guatemala, trade agreement with......... 466
Guelph, Ont., Agricultural College........ 196
— building permits for.................... 453
— exports and imports.................... 549
— gross postal revenue of................. 732
— manufactures........................... 441
— population of........................... 103
Gums and resins, imports................. 526
Gypsum, exports.......................... 522
— production of.....................319, 325, 354

Haddock, production of.................. 302
Hail insurance.........................998, 1000
Hair and bristles, exports and imports.....516, 528
— goods, manufactures of................. 396
Haiti, trade agreement with............... 466
Hake, production of....................... 302
Half-breeds.............................. 1086
Halibut, production of.................... 302
Halifax, N.S., building permits for........ 453
— exports and imports.................... 549
— gross postal revenue of................. 731
— manufactures........................... 440
— population of........................... 102
— shipping............................... 692
Hamilton, Ont., building permits for...... 453
— employment record of.................806, 807
— exports and imports.................... 549
— gross postal revenue of................. 732

PAGE.

Hamilton, Ont., infantile mortality of..... 145
— manufactures........................... 441
— population of........................... 102
Hams and bacon, exports................. 516
Harbour Commissions..................... 677–8
—— loans guaranteed by Dominion....... 906
—masters................................. 679
— traffic................................ 699–701
Harbours Board, National................. 678
— expenditures on.....................684–5, 687
— facilities of principal.................. 678
— revenues from......................686, 687
Hardware and cutlery, exports and imports. 520, 536
— and tools, manufacture of.............. 398
Hatcheries, fish, number of, etc........... 297
Hats and caps, imports................... 532
—— manufacture of....................... 398
Hay, exports............................. 514
— production of........................205, 212
Health, Dominion Department, administration of............................. 1028–30
—— Dominion expenditure *re*............. 879
—— publications of....................... 1126
— provincial departments................ 1031–6
— public, and related institutions......... 1027–48
—— administration of..................... 1027–36
—— hospitals............................. 1037–43
——— mental.............................. 1044–5
—— institutions.......................... 1045–7
Hemp, bounty on......................... 598
Herring, production of.................... 302
Hides and skins, exports and imports......516, 528
High Commissioner of the United Kingdom in Canada.......................... 72–3
—— for Canada........................... 72
Highways and roads..................662–3, 665–7
History, Canadian, bibliography of....... 36–40
— chronological........................... 40–49
— of Canadian agriculture................ 187–90
— of external trade....................... 456–9
— of fur trade............................ 287
— of lumber trade........................ 281
— of manufactures........................ 377–9
— of mining.............................. 309–10
Hogs, marketed.......................... 592–3
—— prices of............................. 234–5
Homes, benevolent....................... 1045–6
— for incurables.......................... 1036
Honey, production of..................... 230
Hong Kong, trade with..............551, 552, 553
Horses, exports.......................... 514
— number and value of................... 215–6
Horticulture.............................. 224–6
Hosiery, manufacture of.................393, 398
Hospitals, administration of, etc.......... 1037–43
— average daily charges of............... 862
— Dominion Government............1036, 1040–3
— mental................................ 1044–5
— number and types of................... 1036–7
— out-patient departments of............. 1039–40
Hours of labour, by trades................ 842
House furnishings, manufacture of......... 398, 402
—— of commons, constitution, powers of, etc.................................. 58–65
—— members of.......................60–5, 1163
—— representation in the................. 59–60
—— rents................................. 860–1
Households, circulation of newspapers and periodicals by....................... 772
Housing Act, Dominion................... 443
Hudson Bay drainage basin............... 13
—— lowland.............................. 22
—— railway, expenditure *re*...............636, 641
Hull, Que., exports and imports........... 549
— gross postal revenue of................. 731
— manufactures........................... 440
— population of........................... 102
Hungary, trade agreement with........... 465
Hydro-Electric Power Commission of Ont. 366–72
—— of Manitoba.......................... 375
—— of New Brunswick and Nova Scotia.. 373–4
—— of Saskatchewan..................... 375–6
Hydro-electric power, public ownership of. 366

PAGE
Hydro-electric power production 366
Hygiene, laboratory of 1029-30

Ice, artificial, manufacture of 400
Ice-cream cones, manufacture of 396
Illegitimate births 125-6
Immigrant population 97-8
— arrivals 156-7, 164
Immigrants, assimilation of 159
— Chinese 170-1
— conjugal condition of 156-7
— countries of birth of 162-3
— deportations of 168
— destinations of 164
— East Indian 171-2
— effect on population 160
— Japanese 171
— juvenile 169
— languages of 161
— nationalities of 161-2
— occupations of 164-6
— Oriental 169-72
— prohibited 167-8
— racial origins of 158-9
— rejections of 168
— sex of 156-7
Immigration, Canadians returning 173-4
— expenditure *re* 172
— statistics of 154-74
Implements, agricultural, exports and imports 520, 536
—— manufacture of 398
Import valuations 496-7, 502, 524-43
— duties 459-69, 505, 549-50
—— amounts collected 505, 544-5
—— rates of 508
Imports, by continents 481, 493, 500-1
— by countries 484-5, 494, 500-1, 552-3
— by degree of manufacture 500-1, 546-7
— by origin 546-7
— by ports 549-50
— by purpose 548
— by tariff rates 551
— dutiable 544
— free 544
— from principal countries 493-4
— of bullion 504
— of principal commodities 496-7, 524-43
— per capita and ratio to exports 503
— through the United States 491, 492, 555
— trade, general analysis 486-8
— wholesale price index numbers of 859
Income, agricultural 200-2
— national 927-31
— tax receipts 877, 886-91
—— by incomes of taxpayers 888
—— by occupations of taxpayers 889
—— from special five per cent tax 890
— War Tax Act 874
Incomes assessed, by provinces 887
Incorporation, charters granted 1095
Incurables, hospitals for 1036
Index numbers of agricultural prices 235-7
—— of bond yields 870
—— of common stocks 867-8
—— of cost of living 860-1
—— of employment 808-9
—— of hospital charges 862
—— of import and export values 859
—— of mining stocks 869
—— of preferred stocks 868-9
—— of rates of wages 841
—— of retail prices 860-1
——— sales 617-9
—— of security prices 867-9
—— of wholesale prices 851
——— sales 606-8
India, gold, silver, and coal production of 339, 351
Indian Affairs Branch, administration of 1084-5
—— expenditure of 879
—— publications of 1125
— lands 1087

PAGE.
Indian treaties 1085
— population 1086
Indians, education of 1086-7
— farm live stock of 1087
— field crops of 1087
— income of 1088
— legislation *re* 1145
Indictable offences, numbers of 1055-60
Indies, West, trade agreement with 462
Industrial accidents 792-3
— designs 600
— disputes 798-800
— Disputes Investigation Act 779-80
— equipment manufactures 402-3
— materials, prices of 853-4
— research 1023
Industries—see "Manufactures".
— statistics of 40 leading 407-9
— workers engaged in 448-54
Infantile mortality 141-7
Information, official, sources of 1106-41
Ink, manufacture of 400
Inland fisheries 296
— revenue 892-4
— shipping 691, 694
— waters 8, 12-3
Insane, hospitals for the 1044-5
Insects, control of forest 254-63
Insolvency legislation 1003
Inspection of gas and electricity 602-3
— of grain 586-7
— of steamboats 680-1
Institutional statistics 1036-47
Institutions, charitable and benevolent 1045-6
— corrective and reformative 1046-7
Instruction, public—see "Education".
Insurance Act, Dominion 970
— accident 997, 998, 1000
— automobile 997, 998, 1000
— aviation 998, 1000
— burglary 997, 998, 1000
— companies, Canadian, abroad, investments of 929
—— Dominion tax, revenue from 877
— death rates in Canada 987
— Department, publications of 1124
— employers' liability 998, 1000
— fire 971-83
—— British companies 975-6, 979-81
—— Canadian companies 974-5, 979-81
—— Dominion licensees 982
—— foreign companies 976-8, 979-81
—— losses paid 982-3
—— premiums received 974-8
—— provincial licensees 982
—— summary statistics of 973-4
— forgery 998, 1000
— government annuities 1001-2
— guarantee 998, 1000
— hail 998, 1000
— inland transportation 998, 1000
— inspection, Dominion revenue from 878
— life 983-97
—— British companies 984-6, 988-90
—— Canadian companies 984-6, 988-91, 993
——— outside Canada 996
—— claims paid 985-7
—— currencies other than Canadian 994-6
—— Dominion licensees 993
—— foreign companies in Canada 984-6, 988-90
—— fraternal benefit societies 990-3
—— on the assessment plan 991-2
—— premiums received 985-7
—— provincial licensees 993
—— returned soldiers' 1093
—— summary of business of Canadian companies abroad 996
— live-stock 998, 1000
— miscellaneous 998, 1000
— plate glass 997, 998, 1000
— sickness 998, 1000
— sprinkler leakage 1000
— steam boiler 998, 1000

Page.

Insurance, title 1000
— tornado 998, 1000
— weather 998, 1000
Intercolonial Railway, construction of, etc. 630
Interest on debt, expenditure *re* 878, 881
— on investments, Dominion 878, 883
— payments and receipts, international 565
Interest-bearing debt 902-3
Interior Continental Plain—see "Orography" and "Geology".
Internal trade 566-625
International Boundary, length of xxxvii
—— Commission, publications of 1125
— bridges, opening of 1161
— labour organization 786-8
— payments, balance of 561-5
— statistics of agriculture 239-44
Interprovincial trade 566-8
Intra-Imperial trade agreements 459-62
Investments, British and foreign in Canada 928-31
— of Canadian insurance companies operating abroad 929
— interest on Dominion 878, 883
Investors index numbers of common stocks 867-8
Ireland, trade agreement with 461
—— with 500, 552, 553
Iron and steel, bounty on 598
— manufacture of 394-5, 398
— occurrence, by provinces 325
— ore, imports 534
— plates and sheets, imports 534
— production of 319, 325, 340-1
— products, exports and imports 520, 534, 536
Irrigation, agricultural 238-9
Islands of Canada 13, 14
Italy, gold and silver production of 339
— treaty with 466

Jail sentences 1052-3
Jamaica, trade with 500, 551, 552
Japan, exports to 494, 501, 554
— imports from 494, 501, 552
— mineral production of 335, 339, 351
— trade agreement with 466
Japanese immigration 170, 171
Jewellery and silverware, manufacture of 400
— imports 542
Journalism in Canada, beginning of 738-44
Judicial appointments 1165-6
— statistics 1049-70
—— appeals in criminal cases 1053
—— breaches of traffic regulations 1064-5
—— convictions for all offences 1049-53
——— for drunkenness 1062-3
——— for indictable offences 1055-60
——— of females 1059
——— summary 1061-6
—— juvenile delinquency 1066-9
—— municipal police 1069-70
—— pardons 1053
—— penitentiaries 1070-3
—— recidivism 1061, 1068
—— reduction of sentences 1167
Justice, cost of administration of 879
— legislation *re* 1145-6
Jute fabrics, imports 530
Juvenile delinquency 1066-9
— immigration 169

Kamloops, B.C., building permits for 454
— gross postal revenue of 732
— population of 104
Keewatin district, area of 8
King's Printer and Controller of Stationery, publications of 1124
— Privy Council, members of 53, 1163
Kingston, Ont., building permits for 453
— exports and imports 549
— gross postal revenue of 732
— manufactures 549
— penitentiary (Portsmouth) 1070
— population of 102
— Royal Military College 1083

Page.

Kingston, Ont., shipping at 692
Kitchener, Ont., building permits for 453
— exports and imports 549
— gross postal revenue of 732
— manufactures 441
— population of 102
Knitted goods, manufacture of 398

Labour, All-Canadian Congress of 789
— and wages 774-849
——— provincial 782-6
— Canadian Federation of 789
— Dominion Department of 779-82
—— publications of 1124-5
— farm 230-2
—*Gazette* 781-2
— international organization of 786-8
— legislation *re* 782, 830-4, 1146-7
—— Dominion 782, 830
—— provincial 830-4
— organizations 788-92
— Provincial Departments and Bureaus of 782-6
— strikes and lockouts 798-800
Labourers, earnings of 841, 842
— wage rates in building trades 841, 842
Lachine, Que., canal 677, 684, 685, 686
— manufactures 440
— population of 103
Lake ports, wheat movement *via* 587
Lakes and rivers 12-3
— area of 12
— elevations of 12
— Great 12
Lamps, electric, imports 538
Lands, classification of (agricultural, forested, etc.) 26-7
—— by tenure 1074
— Dominion public 1075-7
—— revenue from 878
— occupied and improved 27
— provincial public 1078
— railway grants 639
— resources 26, 27
— scenic and game resources 26-32
— timber, administration of 263-5
— unoccupied, occupied, improved, etc 27
Language spoken and mother tongue 98-9
Languages, official 98-9
Lard and compounds, exports and imports 516, 530
— stocks in cold storage 597
Laths, exports 518
— production of 282
Latvia, trade agreement with 466-7
Laurentian Plateau or Canadian Shield 16-9
Lead, bounty on 598
— occurrence, by provinces 324, 341, 342
— production of 319, 324, 341
—— of world 342
— products, exports and imports 520, 538
League of Nations, Canada and the 75-7
——— membership of 77
Leather products, exports and imports 516, 528
— manufacture of 392, 396
— tanneries 392, 396
Legislation, Dominion 1142-51
—— agricultural 1144-5
—— civil service 1145
—— employment 1146
—— expenditure *re* 879
—— finance and taxation 1142-4
—— Indians 1145
—— insurance 1145
—— justice 1145-6
—— labour 782-6, 830-4, 1146-7
—— miscellaneous 1150-1
—— natural resources 1147
—— Parliamentary representation 1147
—— pensions 1148
—— railways 1149
—— respecting combinations in restraint of trade 834-5
——Royal Canadian Mounted Police 1148

PAGE.
Legislation, Dominion, trade and commerce 1148
—— transportation 1148–50
Legislative Assemblies 66
Lemons, imports 524
Leprosy 1029
Lethbridge, Alta., building permits for 454
— exports and imports 550
— gross postal revenue of 732
— manufactures 442
— population of 103
Letters patent granted 600
Lévis, Que., population of 103
Liabilities of Provincial Governments 917
Libraries, public 1023–4
— travelling 1024
Licences, excise, and distillation 893
Lieutenant-Governors of provinces 67–71
Life insurance—see "Insurance".
Light, heat and power equipment industry 404
Lighthouses, number in operation 675
Lightships, number in operation 675
Lignite, production of 348
Linen, manufacture of 398
— yarns, bounty on 598
Liquor control and sale 622–5
— consumption of 623, 625
Literacy of population 107–8
Lithographing industry 398
Lithuania, trade agreement with 467
Live stock, exports and imports 514, 528
—— grading of 592
—— marketing of 589–93
—— number of 215–6
—— of the world 245–6
—— prices of 235–6
—— receipts and disposition of 590–1
—— slaughtered 589, 593–4
—— value of 215–7
Living, index numbers of cost of 860–2
Loan and trust companies, assets and liabilities of 959–63
—— Dominion 960
—— provincial 960
—— summary statistics of 960
— Board, Farm, Canadian 191–2
— companies, small 963–4
— flotations, Dominion, expenditure *re* 878
Loans, bank 948
— Dominion Housing Act 444–5
— Government Home Improvement Plan 446
— National Housing Act 444–5
— on insurance policies 988
— to provinces 896–7
Lobsters, exports 514
— production of 302
Local government 50
Lockouts and strikes 798–800
Logs, exports and imports 518, 532
— production of 272
London, Ont., building permits for 453
— exports and imports 550
— gross postal revenue of 732
— infantile mortality of 145
— manufactures 441
— population of 102
Lumber, exports and imports 283, 518, 532
— industry (sawmills) 281–3, 398
— production of 281–3
— trades, wages, in logging and sawmilling 841

Macaroni and vermicelli, manufacture of 396
Machinery, exports and imports 520, 536
— manufacture of 398
Mackenzie district, area of 8
Mackerel, production of 302
Magazines, circulation of 765
— and newspapers, imports 534
Magnesite, production of 319, 325
Mail service, rural 730
— services, air 735–6
—— subsidized 687–8

PAGE.
Mail subsidies, Dominion expenditure *re* 879
Males, births of 117–8
— deaths of 133
Malt, excise tariff on 893
— exports 512
— liquor, consumption of 623, 625
—— manufacture of 396
—— taken out of bond for consumption 894
Management charges on debt, expenditure *re* 878, 881
Manila fibre, bounty on 598
Manitoba Agricultural College 196
—— experiments of 196
— agricultural production of 204, 209
— area and description of 4–5, 8
— births 118, 126, 151
— deaths 151
— Dept. of Agriculture 194
—— of Labour 785
— education—see "Education".
— electric energy generated in 365
— Government publications of 1132–3
— hospitals, summary statistics of all 1036–7, 1039
— Hydro-Electric Power Commission of 375
— judicial convictions—see "Judicial".
— lands, classification of 27, 1074
—Lieutenant-Governors and the Ministry of 69
— manufactures 380–1, 414–5
— marriages 129, 151
— mineral occurrences in—see individual minerals.
—— production of 323–6
— mining laws of 314
— mothers' allowances 838
— motor-vehicle regulations 661
— police statistics 1070
— population of 79–80, 101, 110–1
— production, survey of 180–4, 1169
— public finance of 910–24
— representation in the House of Commons 58, 63–4
—— in the Senate 58
— water powers of 360, 361, 362
— wealth of 927
— workmen's compensation 795–6
Manufactured products, by industries 391–401, 407–16
—— by provinces 380–1, 410–6
——consumption of 384
—— exports and imports 499–501, 546–7
—— prices of 856–8
—— value and volume of 386–9
Manufactures 377–442
Manufacturing, by groups 382–3, 389–401
— by industries 396–401
— by origin of materials 404–7
— by provinces, cities and towns 380–1, 439–42
— capital employed in 385, 396–401, 418–9
— efficiency of production 421
— employees 385, 396–401, 419–26
— establishments, by size 430–4
— finishing trades 393
— history 377–9
— industries, by purpose 402–4
—— forty leading 407–9, 427–8
— localization in cities and towns 438–42
— power and fuel used for 385, 396–401, 435–8
— provincial distribution of 410–6
— real earnings of employees 429
— salaries and wages in 385, 390, 396–401, 426–30
— textile 382–3, 392–3, 396–8
Maple sugar, exports 512
—— production of 227
— syrup, production of 227
Marine, Canadian Government Merchant 688
—— expenditure on and revenue from 682–9
— danger signals 675
— origin, exports and imports of 547
Mariners' Fund, Dominion receipts from 878
Maritime Freight Rates Act 651
——— expenditure on 879
— Provinces, area of 1–3, 8

PAGE.
Maritime Provinces, employment in....... 805–6
—— manufactures in....... 380–1, 410–1
Marketing Board, Dominion....... 193
— of live stock and animal products....... 589–93
Marriage, age at....... 127–8
— nativity of persons married....... 128–9
— rates in various countries....... 130
Marriages as affecting racial composition....... 160
— number and rates....... 151
Marten skins, number and value taken....... 294
Masculinity of the population of various countries....... 91
Maternal mortality....... 147–9
Mattresses, manufacture of....... 400
Measures, weights, etc., administration of....... 601–2
—— inspection of....... 602
—— receipts from....... 602
Meat, cold storage....... 597
— consumption of....... 594–5
— exports and imports....... 516, 528
— packing industry....... 396, 408, 409
Medical preparations and drugs, exports and imports....... 522, 540
—— manufactures of....... 400
Medicine Hat, manufactures....... 442
— population of....... 103
Members of the House of Commons....... 60–5
— of the King's Privy Council....... 53
— of the Senate....... 57–8
Men's furnishings, manufacture of....... 396, 398
Mental defectives and institutions for. 1036, 1044–5
Merchandise, exports and imports....... 512, 524
Merchandising and service establishments. 604–21
— retail and services....... 608–21
— wholesale and other bulk....... 604–8
Merchant Marine, Canadian Government....... 688
Metallurgical industries....... 327–33
Metal-mining and smelting industries, purchases by....... 329
Metals—see "Minerals".
— non-ferrous, manufacture of... 382, 395, 396, 400
—— exports and imports....... 520, 538
—— summary statistics of....... 382, 396
Meters, electric and gas, in use....... 603
Mexico, gold, silver, and copper, production of....... 335, 339
— trade with....... 500, 552, 554
Middlings, bran and shorts, exports....... 512
Migratory Birds Treaty....... 29, 1097
Military College, Royal, foundation of, etc. 1083
—— receipts from....... 878
— districts....... 1082
— forces....... 1080–2
Militia, appropriations for....... 879, 1082
— composition of, etc....... 1080–2
— expenditure *re*....... 879, 1082
— pensions, revenue from....... 878
Milk, condensed, production of....... 223, 396
— consumption of....... 224
— manufacture of....... 220–3
— production of....... 220, 221
—— farm value of....... 220, 222
— and its products, exports and imports.. 516, 530
Mineral industries, principal factors in....... 327–9
— lands administration....... 311–6
—— Dominion....... 311–2
—— provincial....... 312–6
— occurrences in provinces....... 323–6
— origin, exports and imports of....... 547
(See individual minerals.)
Minerals, exports and imports....... 520–3, 534–41
— general production of....... 316–26
—— value of....... 316–26
— industrial statistics of....... 327–33
—— manufacture of....... 394–5
— metallic, production of.. 319, 321, 324–5, 347–55
— non-metallic, production of....... 319, 324–6
—— manufacture of....... 395, 400
— provincial production of....... 323–6
— structural materials and clay products 320, 322, 325–6, 355–7
— trends in production....... 317
— volume of production....... 320–2

PAGE.
Miners in coal mines, wages rates of....... 841
Mines and minerals....... 309–57
— and Resources, Dept. of, expenditure *re*. 879
——— publications of....... 1125–6
Minimum wage legislation....... 831. 843–7
Mining industry, growth of in recent years. 329–31
—— principal statistics of....... 331–3
— historical sketch....... 309–10
— legislation *re*....... 311–6
— machinery, imports....... 536
— purchase of commodities and services... 328–9
— stocks, index number of prices of....... 869
Minister to France....... 74
— to Japan....... 74
— to the Netherlands and Belgium....... 74
— to the United States....... 73–4
Ministries and Lieutenant-Governors of provinces....... 67–71
— of the Dominion....... 52
Ministry, the....... 51–2
Mink skins, number and value taken....... 294
Mint, Royal Canadian, coinage at....... 937
Moncton, N.B., building permits for....... 453
— exports and imports....... 549
— gross postal revenue of....... 731
— manufactures....... 440
— population of....... 103
Money order system....... 733–5
Montreal, Que., births and deaths....... 119, 139
— building permits for....... 453
— clearings, bank....... 950
— debits, bank....... 951
— exports and imports....... 549
— gross postal revenue of....... 731
— live stock marketed at....... 590
— manufactures....... 440
— opening and closing of navigation at....... 676
— population of....... 102
— shipping at....... 692
Monumental stone, manufacture of....... 400
Moose Jaw, Sask., building permits for....... 453
—— exports and imports....... 550
—— gross postal revenue of....... 732
—— live stock marketed at....... 590
—— manufactures....... 442
—— population of....... 103
Mortality, by causes....... 135–8
— general....... 132–40
— infantile....... 141–7
— maternal....... 147–9
Mothers' allowances....... 835–40
Motion picture statistics....... 620–1
Motor cycles, registration of....... 664
— vehicle accidents....... 671–2
—— Acts and Regulations....... 660–2
—— breaches of traffic regulations....... 1065
—— sales, financing of....... 616–7
— vehicles, apparent consumption of....... 664
—— exports....... 520, 664
—— imports....... 536, 664
—— manufacture of....... 394, 398
—— registration of....... 663–4
—— retail sales of....... 614–6
—— revenue from taxation of....... 668–9
Motors, electric, imports....... 538
Mountain peaks....... 9–10
— systems and ranges....... 9
Mounted Police, Royal Canadian, administration of....... 1097–8
—— Dominion expenditure *re*....... 879
Movement of grain crop....... 214
Moving picture films—see "Cinematograph films".
Municipal electric installations....... 366–76
— police statistics....... 1069–70
— public finance....... 918–24
Municipalities, assessment of....... 920–1
— bonded indebtedness of....... 921–2
— liabilities of....... 923–4
— manufactures....... 440–2
— numbers of....... 919
— population of urban....... 102–4
— tax receipts of....... 920

PAGE.

Museums.................................. 1025–6
Musical instruments, manufacture of....... 400
Muskrat skins, number and value taken... 294
Mutton, consumption of.................. 595
— in cold storage....................... 597

Narcotic drugs, control of................ 1030
—— charges and convictions............1058, 1062
National debt............................ 898–906
— defence................................1078–83
— Defence Department, publications of.... 1126
—— expenditure *re*...................... 879
— Electricity Syndicate.................. 373
— Employment Commission..............446, 819
— Harbours Board......................... 678
— Housing Act............................ 443–5
— income................................. 927
— parks of Canada........................ 28–31
— railways............................... 630–55
—— legislation *re*.....................632, 642
— registration of persons on material aid... 819–21
— Research Council....................... 1023
—— publications of...................... 1126
— Revenue Dept., expenditure *re*.......... 879
—— publications of...................... 1126
—— receipts of.......................... 878
— Transcontinental Railway, Dominion expenditure *re*........................ 641
— wealth and income...................... 924–31
—— of Canada, by provinces.............. 926–7
Natural increase of population............ 149–53
— gas, production of..................... 319
—— sales of............................. 603
— resources, legislation *re*.............. 1147
Naturalization Act....................... 1095–6
— and citizenship........................ 97–8
Naval Service, administration of.......... 1078–80
—— expenditure *re*...................... 879
Navigation, air (see also "Air Service" and "Aviation")........................ 702–13
— financial statistics of.................. 682–9
— Government aid to...................... 682–6
— inland water..................676–7, 691, 694
— ocean.................................. 689–90
— opening and closing of................. 676
— revenue derived from................... 686
Navy, Royal Canadian..................... 1079
Netherlands, trade agreement with........ 467
New Brunswick, agricultural production of.204, 207
— area and description of................ 2–3, 8
— births........................117, 126, 151
— deaths................................. 151
— education—see "Education".
— electric energy generated in............ 365
— Electric Power Commission of........... 374–5
— forestry, administration of............. 264
— Government publications of............. 1129
— hospitals, summary statistics of all.1036–7, 1039
— judicial convictions—see "Judicial".
— lands, classification of..............27, 1074
— Lieutenant-Governors and the Ministry of.................................. 68
— manufactures.......................380–1, 411
— marriages..........................129, 151
— mineral occurrences in—see individual minerals.
—— production of........................ 323–6
— mining laws of......................... 313
— motor-vehicle regulations............... 661
— police statistics....................... 1070
— population of......................79–80, 113
— production, survey of...............180–3, 1169
— public finance of...................... 910–24
— representation in Dominion Parliament. 59, 60
—— in the Senate......................... 57
— water powers of..................360, 361, 362
—— developed............................ 362
— wealth of.............................. 927
— Workmen's Compensation Board.......794, 832
New Westminster, building permits for.... 454
— exports and imports.................... 550
— gross postal revenue of................ 733
— manufactures........................... 442
— population of.......................... 103

PAGE.

New York City, infantile mortality....... 147
New Zealand, production of gold, silver, and coal............................339, 351
— trade agreement with................... 461–2
—— with................494, 501, 551, 552, 553
Newfoundland, trade with......494, 500, 552, 553
Newspapers, daily, circulation of.......... 759–60
— development of......................... 737–55
— weekly and semi-weekly, circulation of. 761–4
— and magazines, imports of.............. 534
Newsprint paper, exports from chief countries................................ 280
— production of.......................... 277–9
Niagara Falls, Ont., building permits for.. 453
— exports and imports.................... 550
— gross postal revenue of................ 732
— manufactures........................... 441
— population of.......................... 103
Nickel, exports and imports..............520, 538
— monetary use of........................ 936
— occurrence in Ontario.................. 342
— production of.........................319, 342
Non-ferrous metals, exports and imports 520–2, 538
—— manufactures of....................395, 400
Non-metallic minerals, exports and imports 520, 538
—— manufactures of....................395, 400
North Bay, Ont., exports and imports..... 550
— gross postal revenue of................ 732
— population of.......................... 103
Northwest Territories, administration of.. 71
—— area of............................... 8
—— fur production of.................... 293
—— population of...................... 79, 80
Norway, trade with................551, 552, 554
— treaty with............................ 467
Notes, bank, circulation of............... 939–40
—— reserves.............................. 940–1
— Dominion, circulation and issue of...... 937–9
— postal, issue of....................... 733
Nova Scotia, Agricultural College of...... 196
— agricultural production of...........204, 206
— area and description of................ 2, 8
— births..............................117, 126
— deaths................................. 151
— Department of Labour.................. 783
— education—see "Education".
— electric energy generated in............ 365
— forestry, administration of............. 264
— Government publications of............. 1128–9
— hospitals, summary statistics of all.1036–7, 1039
— judicial convictions—see "Judicial".
— lands, classification of..............27, 1074
— Lieutenant-Governors and the Ministry of 67
— manufactures.......................380–1, 411
— marriages..........................129, 151
— mineral occurrences in—see individual minerals.
——production of......................... 323–6
— mining laws of......................... 313
— mothers' allowances.................... 837
— motor-vehicle regulations............... 661
— police statistics....................... 1070
— population of.......................... 79, 80
— Power Commission of.................... 373–4
— production, survey of...............180–3, 1169
— public finance of...................... 910–24
— representation in House of Commons.... 59, 60
—— in the Senate......................... 57
— water powers of..................360, 361, 362
— wealth of.............................. 927
— Workmen's Compensation Board.......793, 832
Nursery trees, number of, etc............. 225–6
Nurses, Victorian Order of................ 1047
Nutrition and family living expenditures... 862–5
Nuts and bolts, iron, imports............. 536
— imports................................ 524

Oatmeal, exports....................... 512
Oats, area, yield, and value of.........205, 212
— crops, distribution of.............214, 584–5

Page.
Oats, exports 512
— inspection of 586–7
— prices of 232, 233, 236
— receipts of 588
— shipments of 587–8
— stocks in store 213, 584
— world production of 241
Obituary 1161–3
Observatories, Dominion, publications of 1125
Occupational trends in Canada 774–8
Occupations of Canadian people 110, 774–8
— of immigrants 164–6
— of part-time farm operators 237
— of persons convicted for indictable offences 1060
Offences, indictable, charges, and convictions 1056
— juvenile 1066–9
— non-indictable 1061–6
Office machinery, exports and imports 520, 536
Official appointments 1163–5
— languages 98–9
— publications 1108–20, 1123–35
Oils, animal, exports and imports 516, 530
— fish, etc., imports 530
— lubricating, imports 540
— mineral, exports and imports 522, 540
— vegetable, imports 526
Oka Agricultural Institute 196
Old age pensions 821–4
One Big Union 792
Ontario Agricultural College 196
—— experiments of 196
— agricultural production of 204, 208
— area and description of 3–4, 8
— births 118, 126, 151
— deaths 151
— Dept. of Agriculture of 194
—— of Labour 784–5
— education—see "Education".
— forestry, administration of 264
— fur production of 290, 293
— Government publications of 1130–2
— hospitals, summary statistics of all 1036–7, 1039
— Hydro-Electric Power Commission of 366–72
— judicial convictions—see "Judicial".
— lands, classification of 27, 1074
— Lieutenant-Governors and the Ministry of 69
— manufactures 380–1, 413–4
— marriages 129, 151
— mineral occurrences in—see individual minerals.
—— production of 323–6
— mining laws of 314
— mothers' allowances 838
— motor-vehicle regulations 661
— police statistics 1070
— population of 79–80
— production, survey of 180–3, 1169
— public finance 910–24
— representation in the House of Commons 59, 62–3
—— in the Senate 57–8
— savings banks of 958
— water powers of 360, 361, 362
— wealth of 927
— Workmen's Compensation Board 795, 832
Oranges, imports 524
Orders, money, issued 733–5
Ordnance lands, Dominion receipts from 878
Ore, iron, production of 340–1
— silver-cobalt 333, 344
Organized labour, strength of 788–92
Oriental immigration 169–72
Origins of exports and imports 546–7
— of the people 93–4
Orography 9–11
Orphanages 1037
Oshawa, Ont., building permits for 453
— exports and imports 550
— gross postal revenue of 732
— manufactures 441
— population of 103

Page.
Ottawa, Ont., building permits for 453
— canals 677, 684, 685, 686, 695–6, 697
— exports and imports 550
— gross postal revenue of 732
— manufactures 441
— population of 102
Outremont, Que., population of 102
Owen Sound, Ont., building permits for 453
— gross postal revenue of 732
— manufactures 441
— population of 103
Oysters, catch of 302

Pacific cable 715
— drainage basin 13
— ports, wheat movement *via* 580–2
Paints, manufacture of 400
— varnishes, etc., exports and imports 522, 540
Panama canal 698–9
—— Canadian traffic *via* 699
— trade agreement with 467
Paper, exports and imports 518, 534
— production of 277–9
Papers, special, circulation of 765–70
Pardons granted 1053
Parks, national 28
— provincial 29–31
Parliament, Dominion, composition, powers, etc 50–65, 1147
—— duration and sessions of 54–5
Parliamentary representation in Canada 55–65, 1147
Patent fees, Dominion receipts from 599
— medicines, manufacture of 400
Patents, administration of 598–600
Patients in hospitals 1037–9
Payments, balance of international 561–5
Peace River Block 1078
Peaches, production of 225
Peanut oil, crude, imports 526
Pears, production of 225
Peas, production of 205, 212
Penitentiaries, Dominion expenditure *re* 879
— revenue from 878
Penitentiary statistics 1070–3
Pens, fountain, and pencils, manufacture of 400
Pension Appeal Court 1092
— Commission, Canadian 1090
Pensions Act, administration of 1088–9
— and National Health, Dept. of 1088–90
—— expenditure *re* 879
—— hospitals 1041–2
—— publications of 1126
— appeals in connection with 1092
— expenditure *re* 823, 879, 1089–91
— for the blind 823–4
— legislation *re* 1148
— numbers in force 1091
— old age 821–4
—— expenditure *re* 823, 878
—— number in force 823
— scale of 1092
Perfumery, imports 542
Periodicals, publication and circulation of 771–3
Permits, building, issued 452–5
Peterborough, Ont., building permits for 453
— exports and imports 550
— gross postal revenue of 732
— manufactures 441
— population of 103
Petroleum, bounty on 598
— exports and imports 522, 540
— occurrence, by provinces 352
— production of 319, 352
— refining industry 395, 400
Physical volume of business 1151
Physiography of Canada 1–33
Pickerel, production of 302
Pickles and sauces, exports and imports 512, 524
Piers, maintenance of 685
Pig iron, production of 340
Pigs, number and value of 215–6
Pilchards, production of 302

PAGE.
Pilotage 680
Pineapples, imports 524
Pipe, iron, exports and imports 529, 536
Places, elevations of *facing page* 11
Plains region, physiography of the 23
Planks and boards, exports 283, 518
Plants and trees, imports 526
Plate glass, imports 540
—— insurance 997, 998, 1000
Plates and sheets, iron, imports 534
Platinum, production of 319, 343
Poland, trade agreement with 467
Poles, telegraph, exports 518
Police, Royal Canadian Mounted, administration of 1097-8
—— expenditure *re* 879
—— strength and distribution of 1098
— statistics, municipal, by provinces 1070
Political subdivisions 1-8
Pollock, production of 302, 303
Population, age distribution of 92
— and area of the British Empire 113
—— of the world 113
— annual estimates of 112-3
— area and density of 84-8
— births 116-27, 151, 153
— birthplaces 96-7
— blind and deaf mutes 108
— Canadian-born 96
— census statistics of 79-89, 110-2
— centres of 84
— cities, towns and villages 102-7
— citizenship and naturalization of 97-8
— conjugal condition of 91
— deaths 131-40
— density of 84-8
— divorces 130-1
— dwellings and family households 109-10
— educational status of 1010-1
— electoral districts 60-5
— elements of growth of 88-9
— estimated for each year, 1900-38 113
— families, by class and size 109
— foreign-born, citizenship of 96-8
— growth and distribution of 79-89
— households, urban, in rented homes 109
— immigrants 154-74
— increase of 78-89
— Indian 1086
— infantile mortality of the 141-7
— language spoken and mother tongue 98-9
— literacy of 107-8
— marriages 127-30, 151
— natural increase of 149-53
— occupations of 110, 774-8
— of provinces and territories 79-80
— racial origins of 93-4
— religions of 94-6
— rented homes, dwellers in 109
— rural and urban 99-107, 111-2
— school attendance 108
— sex distribution of 89-91, 111-2
— summary of births, deaths, natural increase, and immigration 89
— urban and rural 99-107, 111-2
Pork, consumption of 594
— stocks in cold storage 597
Port Arthur, Ont., building permits for 453
— exports and imports 550
— grain shipments from 587
— gross postal revenue of 732
— manufactures 441
— population of 103
— shipping 692
Ports, imports by customs 549-50
— shipping entered and cleared 692-3
Portugal, trade with 552, 554
— treaty with 467
Post Office Department, administration of 730
—— auxiliary services 733-4
—— expenditure *re* 733, 879
—— mail subsidies 687-8
—— money order service 733-5

PAGE.
Post Office Department, number of offices 731
—— publications of 1127
—— revenue of 731-3, 878
—— rural mail delivery 730
—— savings bank 733-4, 956-7
—— stamp issue 733
Postage stamps sold 733
Postal notes issued 733-4
Potatoes, exports and imports 514, 524
— production of 204, 205-11
— world production of 244
Pottery, production of 320
Poultry, consumption of 595
— exports 516
— number of 215, 217-8
— stocks in cold storage 597
— values of 217-8
Power Commissions, Hydro-Electric 366-76
— installed in manufactures 435-8
Prairie Provinces, agricultural production of 204, 209-11
— census of 110-2
— grain crops of 209-11, 212
— manufactures 380-1, 414-5
— population of 79-80
— quinquennial census of 110-2
— value of farm production 200-2
Precious metals, exports and imports 520, 538
—— production of 319, 324, 336, 344
Preferential tariff 459, 463
—— imports under 551
Preferred stocks, index numbers of 868-9
Premiers of the provinces 67-71
Premium and discount, Dominion expenditure *re* 878
—— receipts from 878
Press in Canada, development of the 737-58
—— statistics of 758-73
Prices, agricultural, index numbers 235-6
— by purpose 856
— general 850-70
— of agricultural produce 233-5
— of commodities 850-8
— of industrial materials 853-4
— of services 861-2
— retail 860-6
— wholesale 850-9
Prime Ministers of Canada 52
Prince Albert, Sask., gross postal revenue of 732
— live stock marketed at 590
— manufactures 442
— population of 103
Prince Edward Island, agricultural production of 204, 206
— area and description of 1-2, 8
— births 117, 126, 151
— deaths 151
— education—see "Education".
— electric energy generated in 365
— Government publications of 1128
— hospitals, summary statistics of all 1036-7, 1039
— judicial convictions—see "Judicial".
— lands, classification of 27, 1074
— Lieutenant-Governors and the Ministry of 67
— manufactures 380-1, 410
— marriages 129, 151
— motor-vehicle regulations 661
— police statistics 1070
— population of 79-80, 101
— production, survey of 180-3, 1169
— public finance of 910-24
— representation in the House of Commons 59, 60
—— in the Senate 57
— water powers of 360, 361, 362
— wealth of 927
Principal events of the year 1151-61
Printed matter, exports and imports 518, 534
Printing industry 398
— machinery, imports 536
— paper, exports and imports 518, 534
— trades, wages in 841, 842
Privy Council, members of 53, 1163

PAGE.
Producers' co-operation 826–9
— materials, manufacture of 402–3
Production, agricultural 196–246
— branches of 176–8, 181–3
— construction 443–55
— fisheries 296–308
— forestry 247–86
— fur 287–95
— general survey of 175–86, 1169
— grain 203–11, 212
— manufactures 379–83, 389–409
— mining 316–26
— provincial 183–6
— summary of 175–86
— water power and hydro electricity 359–76
Products, live-stock, consumption of 594–5
Property, farm, value of 202, 926
— urban, value of 926
Prospectors, laws concerning 311
Protective tariff for manufactures 459–69
Provinces, climate of 32
— general elections in 1161
— government of 50, 66–71
— loans by Dominion to 896–7
Provincial and local government 50, 66–71
— debts and assets 916–8
— expenditures 908, 910–11, 914–5
—— debt charges 914–5
—— education 914–5
—— public welfare 914–5
— government savings banks 957–8
— governments, publications of 1128–35
— legislatures and ministries 67–71
— life insurance companies 996–7
— liquor control and sales 622–3, 624
— motor-vehicle regulations 660–2
— parks 29
— public finance 907–18
—— lands 1074
— revenues 668–9, 908–13
— Royal Commissions 1137–41
— taxation, gasoline 669, 909
—— licences and permits 669, 912–3
—— liquor traffic control 912–3
Prunes and dried plums, imports 524
Public accounts, finance 871–931
—— changes in 877
— Archives, Department of 34–6
—— publications of 1127
— debt 871, 898–906
— finance, historical sketch 873–5
— health activities of the Dominion Government 1028–30
—— of the Provincial Governments 1031–6
— health and related institutions 1027–48
—— hospitals 1037–43
——— mental 1044–5
—— institutions 1045–7
— lands 1075–8
— ownership of hydro-electric power 366–76
— schools—see "Education".
— works Department, expenditure and revenue 878, 879, 1084
—— graving docks 679, 1084
Publications, number and circulation of 771–3
— daily 759–60
— French language 773
— magazines 765
— of Bureau of Statistics 1108–20
— of Dominion departments 1123–8
— of Provincial Governments 1128–35
— special 765–70
— weekly and semi-weekly 761–4
Pulp and paper industry 273–81, 398
—— electric energy used in 362
—— machinery, imports 536
— exports and imports 277, 518, 534
— production of 275–7
Pulpwood, exports and imports 274, 518, 534
— production and consumption of 274

PAGE.
Quarantine 1029
Quebec city, building permits for 453
—— exports and imports 549
—— gross postal revenue of 731
—— manufactures 440
—— population of 102
—— shipping at 692
— agricultural colleges 196
—— experiments of 196
—— production of 204, 207–8
— area and description of 3, 8
— births, deaths 118, 126, 151
— Department of Labour 783–4
— education—see "Education".
— electric energy generated in 365
— forestry in 264, 273, 277, 282
— Government publications of 1129–30
— hospitals, summary statistics of all 1036–7, 1039
— judicial convictions—see "Judicial".
— lands, classification of 27, 1074
— Lieutenant-Governors and the Ministry of 68
— manufactures 380–1, 411–2
— marriages 129, 151
— mineral occurrences in—see individual minerals.
—— production of 323–6
— mining laws of 313
— mothers' allowances 837–8
— motor-vehicle regulations 661
— National Electricity Syndicate 373
— opening and closing of navigation at 676
— police statistics 1070
— population of 79–80, 101
— production, survey of 180–3, 1169
— Provincial Electricity Board 373
— public finance of 910–24
— representation, House of Commons 59, 61–2
—— in the Senate 57
—Streams Commission 372–3
— water powers of 360, 361, 362
— wealth of 927
— Workmen's Compensation Board 794, 832
Quotations, exchange, monthly averages of 968–9

Race-track betting 1103–4
Racial composition, effect of immigration on 160
Radio, administration of 719–21
— Aeronautical Service 723
— Canadian Broadcasting Corporation 725–9
——— facilities 726–7
——— finances 727
——— national network 727
——— programs 725, 728–9
— interference, investigations of 721
— receiving sets 720
— stations, Government 721–4
—— private 724–5
—— provincial 724
Radiotelegraphy 722
Radiotelephony 722
Radium and uranium, production of 343–4
Rags, exports and imports 516, 532
Railroad ties, exports and imports 518, 532
Rails, imports 534
Railway Belt of British Columbia 1078
— Canadian Northern 631
— Canadian Pacific 631, 636, 639, 641
— cars, manufacture of 398
— Commission 628
— Grand Trunk 630
——— Pacific 631
— Intercolonial 630
— securities guaranteed by Dom. Govt. 904–6
Railways and Canals, Dept., publications of 1127–8
—— Dominion expenditure *re* 879
— Canadian National 636, 639, 640–9, 651
— electric, accidents 658
—— capital and earnings of 656–7
—— employees, number of 656–7

PAGE.

Railways, electric, financial statistics of... 656–7
—— freight and passenger traffic on........ 657–8
—— history of........................ 655–6
—— mileage and equipment of............ 656
—— operating expenses of.................. 656–7
—— salaries and wages of.................. 656–7
—— wage rates of employees..............841, 842
— Government, capital expenditure *re*..... 640–2
—— expenses of and revenue from......... 643
—— investments in...................... 644–6
—— ownership of....................... 640
— legislation in 1938.................... 1149
— steam................................ 630–55
—— accidents........................... 653–5
—— aid to, by Government.............. 639–40
—— bonds, guaranteed................... 640
—— capital of.......................... 636–7
—— commodities hauled.................. 652–3
—— consolidation of....................630–2, 642
—— earnings of.......................636, 637, 643
—— employees, wages and salaries of...... 638
—— finances of......................... 635–49
—— freight and passenger traffic on........ 649–50
—— Government, finances of............. 640–9
—— history of.......................... 630–2
—— investment in.....................636–7, 641
—— land granted to..................... 639
—— liability of........................ 635–6
—— mileage of.......................632–3, 636
—— operating expenses of..........636–7, 638, 643
—— rolling-stock of..................394–5, 634
—— Royal Commission of 1931........... 632
—— salaries and wages.................. 638
—— subsidies, cash...................... 640
——— land.............................. 639
—— traffic.............................. 649–55
—— wage rates, index numbers of......... 841
Rainfall................................ 32
Raisins, imports......................... 524
Raw materials, exports and imports. 499–501, 546–7
—— used in manufactures, cost of. 380–3, 385, 396–401
R.C.M.P., administration of............. 1077–8
—— air operations....................... 707
Receipts and disbursements of Canada.... 876–85
Red Cross Society....................... 1047
Redistribution of members in the House of Commons......................... 59
Reduced railway fares.................... 801–2
Re-exports of foreign produce............. 472–3
Refineries, sugar......................... 227
Reformative institutions.................. 1046–7
Regina, Sask., exports and imports........ 550
— gross postal revenue of................. 732
— manufactures.......................... 442
— population of......................... 102
Register, annual......................... 1142–67
Registration, national, of persons on material aid.......................... 819–21
Registry, vessels on the.................. 673–4
Relief settlement......................... 818–9
— unemployment......................812–9, 1146
—— and Agricultural Assistance Act...... 813
—— persons on urban and agricultural aid.. 821
— works................................ 817–8
Religions of the population................ 94–6
Rents, family expenditures on, by income groups............................... 865
— index numbers of prices of............. 860–1
Representation Act.....................55–6, 58–9
— in the House of Commons.............. 60–5
— in the Senate......................... 57–8
— Parliamentary........................ 50–71
— readjustments in...................... 59
— unit of.............................. 59–60
Research Council, publications of.......... 1126
— scientific and industrial................ 940–1
Reserves, monetary...................... 940–1
Resins and gums, imports................. 526
Resources, forest........................ 251–3

PAGE.

Retail merchandise trade................. 608–19
— merchandising and services............ 604–21
— prices, index numbers of............... 860–2
— sales, monthly indexes of.............. 617–9
— trade, annual statistics of.............. 610–3
Returned soldiers' insurance.............. 1092
Revenue, agricultural..................... 200–3
— Dominion.........................876–8, 883–93
— excise duties.......................... 893
— inland............................... 892–4
— municipal........................919–20, 923–4
— provincial........................668–9, 908–13
—— liquor control......................909, 912
—— motor vehicles................668–9, 909, 912
— War tax............................. 887–91
Rice, imports........................... 524
Rivers and lakes......................... 12–3
— systems.............................. 13
Roads and highways, finances of.......... 665–9
—— mileage of.......................... 663
— expenditures *re*....................... 665–7
— projects under Canada Highways Act... 665–6
— traffic on............................ 669–70
Rocky mountains........................ 9–10
Rods and bars, iron, imports.............. 534
Rolling-mill industry, manufactures of.....394, 398
— products, exports and imports...........520, 534
Rolling-stock of steam railways........... 634
Roumania, trade agreement with.......... 467
Royal Canadian Mounted Police, administration of............................ 1097–8
——— air service......................... 707
——— legislation *re*....................... 1148
——— officers' pensions, Dominion receipts from.............................. 878
—— Navy.............................. 1079
— Commission of 1931................... 632
— Commissions, British.................. 1141
—— Dominion........................... 1135–7
—— Provincial.......................... 1137–41
— Military College, organization of........ 1083
——— revenue from...................... 878
— tour of Canada, 1939.................. 1155–60
Rubber boots, exports.................... 512
— crude, imports........................ 526
— goods, manufacture of.................391, 396
— products, exports and imports..........512, 526
— tires, exports and imports..............512, 526
Rugs, woollen (carpets), imports.......... 532
Rural and urban population..........99–107, 110–2
— mail delivery......................... 730
Russia (Soviet Union), gold and silver production of......................... 339
— trade agreement with.................467, 468
—— with..............................553, 554
Rye, crop distribution of.................. 584–5
— exports.............................. 512
— inspections of......................... 586–7
— production of.........................205, 212
— receipts and shipments of.............. 587–8
— world production of................... 243

Sailing vessels arrived and departed...... 694
St. Boniface, Man., building permits for... 453
— gross postal revenue of................ 732
— manufactures......................... 442
— population of......................... 103
St. Catharines, Ont., building permits for.. 453
— exports and imports................... 550
— gross postal revenue of................ 732
— manufactures......................... 441
— population of......................... 102
St. Hyacinthe, Que., exports and imports... 549
— gross postal revenue of................ 731
— manufactures......................... 440
— population of......................... 103
Saint John, N.B., building permits for..... 453
— exports and imports................... 549
— gross postal revenue of................ 731
— manufactures......................... 440
— population of......................... 103
— shipping............................. 692

Page.
Saint John, N.B., vital statistics of 118, 139, 145, 152
St. Lawrence canals 677, 684, 685, 686, 695-7
— forest area 247, 248
— lowlands, geology 11, 19-20
— region 19-20
— river system 12
St. Thomas, Ont., building permits for 453
— exports and imports 550
— gross postal revenue of 732
— manufactures 441
— population of 103
Sales, motor vehicle, financing of 616-7
Salmon, exports 514
— production of 302, 303
Salt, imports 540
— production of 319, 325, 354-5
Salvador, trade agreement with 468
Sand and gravel, production of 320, 326, 356-7
Sardines, exports 514
— production of 302, 303
Sarnia, Ont., building permits for 453
— exports and imports 550
— gross postal revenue of 732
— manufactures 441
— population of 103
Sash and doors, manufacture of 398
Saskatchewan Agricultural College 196
—— experimental stations 196
— area and description of 5, 8
— births 118, 126, 151
— deaths 151
— Department of Labour 785-6
— education—see "Education".
— electric energy generated in 365
— forestry resources and products of 252-3, 273, 281-3
— Government publications of 1133
— hospitals, summary statistics of all 1036-7, 1039
— judicial convictions—see "Judicial".
— lands, classification of 27, 1074
— Lieutenant-Governors and the Ministry of 70
— manufactures 380-1, 414-5
— marriages 129, 151
— mineral occurrences in—see individual minerals.
—— production of 323-6
— mining laws of 314-5
— mothers' allowances 839
— motor-vehicle regulations 661
— police statistics 1070
— population of 79-80, 101, 110-1
— Power Commission 375-6
— production of, agricultural 204, 209-10
— production, survey of 180-3, 1169
— public finance of 910-24
— representation in the House of Commons 59, 64
—— in the Senate 57
— water powers of 360, 361, 362
— wealth of 927
— Workmen's Compensation Board 796-7
Saskatoon, Sask., building permits for 453
— exports and imports 550
— gross postal revenue of 732
— manufactures 442
— population of 102
Sault Ste. Marie, Ont., building permits for 453
— canal 677, 684-6, 695-8
— exports and imports 550
— gross postal revenue of 732
— manufactures 441
— population of 103
— shipping 693
Sausage casings, exports and imports 516, 530
— manufacture of 396
Savings banks 956-8
Sawmill products, exports 283
Sawmilling industry 281-3
Scenery and game, resources of 26-32
Schools—see "Education".
— of agriculture 196
— of forestry 270-1

Page.
Scientific and industrial research 1023
— equipment, imports 542
—— manufacture of 400
Seal, Great, of Canada 1094
Seamen, shipped and discharged 682
Secondary education 1019
Secretary of State, Department of 1094-7
—— publications of 1127
Security prices, index numbers of 867-9
Securities guaranteed by Dominion 904-6
Seeds, exports and imports 514, 528
Senate, composition, powers of, etc 55-8
— members of 57-8
— representation 57-8
Serges and worsteds, imports 532
Service establishments 604-21
Services, employment in 808-9
— prices of 861-2
Settlement, relief 818
— Soldier, of Canada 1094
Settlers' effects, exports and imports 522, 542
Sewing machines, exports and imports 520, 536
Sex distribution of the population 89-91
Shawinigan Falls, Que., building permits for 453
— gross postal revenue of 731
— manufactures 440
— population of 103
Sheep, marketing of 591
— numbers and values of 215-6
— prices of 234-5
Sheet metal industry, manufactures of 398
Sherbrooke, Que., building permits for 453
— exports and imports 549
— gross postal revenue of 731
— manufactures 440
— population of 102
Shingle mills, production of 282
Shingles, exports 518
Shipbuilding industry, manufactures of 398
Shipping and navigation, casualties 682
— coasting 691, 694
— entered and cleared, by ports 691-3
— inland 676-7, 691, 694
— marine danger signals 675
— ocean 689-90, 692-4
— steamboat inspection 680-1
— subsidies 687-8
— vessels registered 674
— water-borne cargo 700-1
— wrecks and casualties 682
Ships on the registry 673-4
— built, and sold to other countries 674
Shipwrecks, number of 682
Shoes and boots, imports 528
— manufacture of 396
Shooks, exports 518
Shops, legislation *re* 1146
Shorts, bran and middlings, exports 512
Sickness insurance 998, 1000
Silk, artificial, exports and imports 516, 532
— exports and imports 516, 532
— manufacture of 393, 398
Silver, exports 520
— imports 538
— monetary use of 936
— occurrence, by provinces 344, 345
— production of 319, 344-6
— world production of 339, 345-6
Sirens, number of 675
Sisal and istle, imports 532
Skins and hides, exports and imports 516, 528
— number taken and value 294
Slaughtering industry 391, 396, 593
Small loans companies 963-4
Smelting industry 332
Smelts, production of 302, 303
Soap, exports and imports 522, 542
— manufacture of 400
Socks and stockings, exports and imports 516, 532
Soda and sodium compounds, exports and imports 522, 542
Soldier Settlement of Canada 1094

Page.
Soldiers' insurance........ 1092
— pensions, scale of........ 1092
Sources of official information........ 1106–41
Southern Rhodesia, trade agreement with. 462
Soviet Union—See "Russia".
Spain, trade agreement with........ 468
Spices, imports........ 526
— manufacture of........ 396
Spirits, consumption of........623, 625, 894
— excise revenue........ 893
—— tariff........ 892
— exports and imports........512, 526
— provincial revenues from........ 624
Sporting and amusement goods, imports... 542
—— manufacture of........400, 404
Stamped and coated products, imports.... 536
Stamps, postage, value of........ 733
— revenue from excise........890, 891
State, Department of the Secretary of, administration of........ 1094–7
Statistics, Dominion Bureau of, activities. 1106–8
—— publications of........ 1108–20
Statute of Westminster........ 50
Steam railways—see "Railways".
Steamboat inspection, administration of... 680–1
— subventions, expenditure *re*........ 687–8
Steel industry........394, 398
— products, exports and imports........520, 534
—— manufacture of........ 398
— structural, imports........ 534
Stereotyping industry........ 398
Stillbirths........ 126
Stock, live, in Canada........ 215–7
—— world........ 245–6
Stocks of grain in Canada........ 212–3
— index numbers of common........ 867–8
——— of mining........ 869
——— of preferred........ 868–9
Stockyards, marketing at........ 591
Stone, production of........320, 326, 356–7
— products, manufacture of........ 400
Stratford, Ont., building permits for........ 453
— exports and imports........ 550
— gross postal revenue of........ 732
— manufactures........ 441
— population of........ 103
Strikes and lockouts........ 798–800
Submarine cables........ 715
Subsidies, mail........ 687–8
— to provinces........ 894–7
— to railways........ 640
Subventions and mail subsidies........ 687–8
Succession duties........ 907
Sugar beets, production of........205, 212, 227–8
—— world production of........ 228
— maple, exports........ 512
—— production of........ 227
— refining industry........227, 396
Suicides........136, 138
Sulphate, ammonium exports........ 522
Sulphur, imports........ 540
Surgical instruments, imports........ 542
Survey of production........175–86, 1169
Sweden, treaty with........ 468
Swine, marketing of........ 591
— numbers and values of........ 215–7
Switzerland, treaty with........ 468
Sydney, N.S., building permits for........ 453
— exports and imports........ 549
— gross postal revenue of........ 731
— manufactures........ 440
— population of........ 103
— shipping........ 692
Syrup, fruit, manufacture of........ 396
— maple, production of........ 227
System of taxation, recent modifications in. 874–5

Tanneries........392, 396
Tariff Board........ 1104
— Canadian excise........ 892
— historical sketch of the........ 456–9
— relationships with British and foreign countries........ 459–69

Page.
Tax, business profits........ 886
— gasoline, by provinces........669, 909
— Income ,War........874, 877, 886–90
Taxation, Dominion revenue from...876–8, 883–93
— legislation *re*........ 1142–3
— modifications in system........ 874–5
— motor vehicles........668–9, 909, 912–3
— per capita........884–5, 911
— provincial, growth of........ 908–9
Tea, imports........ 526
Teachers, salaries of........ 1017
Technical education........ 1015–7
Telegraphs, Canadian system........ 714
— coast wireless stations........ 722
— companies, statistics of........ 715
— Dominion Government, statistics of.... 714
— radio stations........ 722
— submarine cables........ 715
Telephones, companies, finances and operations of........ 716–8
— instruments, imports........ 538
— systems of........ 716
— wireless........ 722
Temperance Act, Canada........ 1097
Textile exports and imports........516, 530
— machinery, imports........ 536
Textiles, manufacture of........392–3, 396
Thanksgiving Day, proclamation of........ 1167
Thread, manufacture of........ 398
Three Rivers, Que., building permits for.. 453
— exports and imports........ 549
— gross postal revenue of........ 731
— manufactures........ 440
— population of........ 102
Ties, railway, exports and imports........518, 532
Tile, production of........320, 326
Timber, estimated stand of........ 253
— exports and imports........283, 518, 532
— industry........ 281–3
— lands........27, 247–53
Time scale, geological........ 15
Tin products, imports........ 538
Titanium, production of........319, 324
Tobacco, consumption of........ 894
— excise, revenue from........ 893
—— tariff........ 892
— exports and imports........514, 528
— leaf, production of........228, 229
— manufacture of........391, 396
Toilet preparations, manufacture of........ 400
Tools, exports and imports........520, 536
— manufacture of........ 398
Tops, worsted, imports........ 532
Toronto, Ont., building permits for........ 453
— exports and imports........ 550
— gross postal revenue of........ 732
— live stock marketed at........ 590
— manufactures........ 441
— population of........ 102
— shipping........ 693
Tour, Royal........ 1155–60
Tourist trade........ 560–1
Town municipalities........ 919
Towns, assets and liabilities of........ 923–4
— expenditures and revenue of........ 923–4
— gross postal revenue of........ 731–3
— manufactures........ 438–42
— population of........ 102–7
Toys, imports........ 542
Trade, aggregate external........ 502
— agreements........ 459–69
— analysis of current........ 486–8
— and Commerce Department....470–2, 1103, 1127
——— employees of........ 1103
——— expenditure *re*........ 879
——— publications of........472, 1127
— and Industry Commission, the........ 1105
— by groups of commodities........ 477–80
— coasting........691, 694
— Commissioners, list of........ 470
— disputes........ 798–800
— external........ 456–565
— geographical distribution of Canadian... 493–4

PAGE.
Trade, geographical, of world............. 480-2
— grain................................... 568-88
— historical sketch....................... 456-9
— in fiscal year 1938-39.................. 1168
— in furs................................. 290
— in raw and manufactured products....... 499-501
— internal................................ 566-625
— interprovincial......................... 566-8
— legislation *re*........................ 1148
— marks, administration of................ 600
— retail merchandise...................... 608-19
— statistics, explanation *re*............ 472-4
— tourist................................. 560-1
— unions, membership of................... 788-92
—— organization of........................ 788-92
— value and quantum of world.............. 476-85
—— and volume of, by main groups.......... 557-9
— *via* United States.....................491, 492
— wholesale and other bulk................ 604-8
— with principal countries......493-4, 500-1, 552-4
— world................................... 476-85
NOTE.—*For trade by class or commodity, refer to the class or commodity.*
Trades and Labour Congress..............789, 791
Trading establishments, census of......... 604-21
Traffic, railway, electric................. 657-8
—— steam.................................. 649-52
— regulations, breaches of................ 1065
— water-borne............................. 673
Train miles run........................... 650
Transatlantic air service.................. 706-7
Trans-Canada airway....................... 703-5
Transport, Dept. of, expenditures *re*..... 879
—— publications of........................ 1127-8
Transportation and communications......... 626-773
—— employment in.......................... 808-9
— government control over................. 627-9
— legislation *re*......................... 1148-50
— of wheat................................ 652
Trapping, production from................178, 179
Treasury bills sold in Canada............. 899
Treaties, Indian.......................... 1085
— trade................................... 459-69
Treaty rate tariffs, imports under......... 551
— reciprocity with United States.......... 468-9
Tree fruits, production of................ 225-6
— nurseries............................... 225-6
— species, forest......................... 251
Trinidad and Tobago, trade with 500, 551, 552, 553
Trout, production of...................... 302, 303
Trust and loan companies.................. 959-63
—— assets and liabilities................. 960-3
— companies, estates, trust, and agency funds............................. 963
Tubes and pipes, iron, exports and imports..520, 536
Tullibee, production of..................302, 303
Turnips, exports.......................... 512
— production of........................... 205-11
Turpentine, imports....................... 528
Tweeds, imports........................... 532
Twine, binder, exports and imports........516, 532
Typewriters, exports and imports..........520, 536

Umbrellas, manufacture of................. 400
Unemployment and Agricultural Assistance Act............................... 813
— in trade unions......................... 802-3
— relief................................812-9, 1146
—— drought................................ 817
—— farm placements....................... 816
—— grants-in-aid.......................... 813-4
—— persons on urban and agricultural aid.. 821
—— settlement............................. 818-9
—— works.................................. 817-8
—— youth training......................... 814-6
— statistics of the Census of 1931........ 809
Union of South Africa, agricultural statistics of....................240, 241, 242, 244
—— coal, production of.................... 351
—— gold and silver, production of........ 339
—— trade agreement with................... 462

PAGE.
Union of South Africa, trade with.......494, 501, 551, 552, 553
— Co-operative of Canada.................. 825
Unions, trade, membership of.............. 788-92
—— organization of........................ 788-92
United Kingdom, agricultural statistics of 240, 241, 242, 244
— Kingdom-Canada Trade Agreement.......... 460
— Kingdom, coal production of............. 351
—— total Canadian trade with.488-90, 506-7, 512-43
—— world trade of........................484, 485
United States, Canadian emigrants returned from............................ 172-3
—— capital invested in Canada............. 931
—— tariffs and Canadian trade............. 468-9
—— total Canadian trade with.491-2, 506-7, 512-43
—— trade agreement with................... 468-9
—— trade *via*.......................491, 492, 555
—— world trade of........................484, 485
Universities—see "Education".
Urban and rural population............99-107, 110-2
— households in rented homes.............. 109
— municipalities, financial statistics of.... 923-4
Uruguay, trade agreement with............. 469

Value and quantum of world trade........ 476-85
—— volume of trade....................... 557-9
Vancouver, B.C., building permits for..... 454
— exports and imports..................... 550
— gross postal revenue of................. 733
— manufactures............................ 442
— population of........................... 102
— shipping................................ 693
Varnishes, paints, etc., exports and imports.522, 540
—— manufacture of......................... 400
Vegetables, by classes, exports and imports.512, 524
— production of........................... 226
— products, exports and imports..........512, 524
—— manufacture of......................... 396
Vehicles, exports and imports........520, 536, 664
— manufacture of...............394, 398, 407, 408
Velveteens and corduroys, imports......... 530
Veneers, wood, imports.................... 532
Venezuela, trade agreement with........... 469
Verdun, Que., manufactures................ 440
— population of........................... 102
Vermicelli and macaroni, manufacture of.. 396
Vessels, manufacture of................... 398
— on the registry.......................... 673-4
Veterans' Bureau.......................... 1092
Victoria, B.C., building permits for...... 454
— exports and imports..................... 550
— gross postal revenue of................. 733
— manufactures............................ 442
— population of........................... 102
— shipping................................ 693
Victorian Order of Nurses................. 1047
Village municipalities..................... 919
Villages, populations of................... 104-7
Vital statistics........................... 114-53
—— births and birth rates................. 116-27
——— multiple.............................. 120
—— collection of.......................... 114-27
—— deaths and death rates................ 131-49
—— divorces............................... 130-1
—— infant and maternal mortality......... 141-7
—— marriages and marriage rates.......... 127-31
—— natural increase....................... 149-53
Vocational education...................... 1015-7
Voters and votes polled, general elections.. 60-5
Wage-earners actually employed............ 812
— cost of living of........................ 866
— distribution of.......................... 774
Wage-earning population, estimates of employment of.............................. 809-12
Wages and hours of labour................. 842-9
— building trades (trades specified)....... 842
— coal-mining.............................. 841
— electric railway trades (trades specified) 656-7, 842
— farm.................................... 230-2

Page.

Wages, female employees, minimum....... 843–6
— index numbers of........................429, 841
— legislation *re*............................ 842–9
— male employees, minimum............. 846–7
— manufacturing.............396–401, 426–30, 841
— metal trades (trades specified)......... 842
— minimum, regulations *re*...........831, 843, 846
— mining................................ 330–3
— on steam railways.....................638, 841
— printing trades (trades specified)....... 842
— rates of.................................. 840–2
— real, in manufacturing.................. 429
— unskilled factory labourers............. 842
Wagons, manufacture of.................. 398
War and demobilization, expenditure *re*.... 882
— business profits tax..................... 886
— Special Revenue Act.................... 874
— tax, itemized revenue from........877, 885, 886
— Veterans' Allowances Act.............. 1092
Washing compounds and soap, manufacture of.................................... 400
Washington, appointment of Minister at... 73–4
Waste, cotton and wool, manufacture of.... 398
Watches and clocks, imports.............. 538
Water area of Canada..................... 8, 12–3
— power development in Canada.......... 359–62
—— energy generated for export........... 366
—— resources............................. 359
—— used in central electric stations....... 362–5
—— used in pulp and paper industry....... 362
Waterproof clothing, manufacture of....... 398
Waterways of Canada..................... 672–701
— equipment and facilities of............. 673–82
— financial statistics of.................. 682–9
— Government aid to..................... 682–3
— revenue from........................... 686
Wealth, agricultural...................... 200–3
— national................................ 924–31
Wearing apparel, cotton, imports.......... 530
—— index numbers of prices of............ 860–1
—— woollen, exports and imports.........516, 532
Weights and measures, administration of.. 601–2
—— Dominion receipts from............... 602
—— inspections of........................ 602
Welfare, child, legislation *re*...............838, 839
Welland canal............677, 684, 685, 686, 695–7
West Indies, trade agreement with........ 462
Westmount, Que., building permits for..... 453
— population of........................... 102
Wharves, maintenance of, etc............. 1084
Wheat Board, Canadian................... 569–72
——— Act................................. 572–4
— consumption of......................214–5, 583
— crop movement of...................214, 580–5
—— distribution of......................214, 584–5
— exports and imports..............245, 512, 583
— flour, exports and imports.........245, 512, 583
— inspection of........................... 586–7
— marketing of........................... 580–5
— prices of...........................232, 233, 236
— production, quantity and value of.......205, 212
— receipts of............................. 588
— shipment of............................ 587–8
— stocks in store......................... 213
— world production of.................... 240
— world exports and imports.............. 245
Whisky, exports and imports..............512, 526
Whitefish, production of..................302, 303
Wholesale prices, index numbers of........ 851
— sales, index numbers of................ 606–8
— trade, census of....................... 604–8
Wild life origin, goods of, exports and imports...................................... 547
Window glass, imports................... 540
Windsor, Ont., building permits for........ 453
— exports and imports.................... 550
— gross postal revenue of................. 732
— manufactures.......................... 441
— population of.......................... 102
Wine, consumption of.....................623, 625
— imports................................ 526
— industry................................ 396
Winnipeg, Man., building permits for...... 454

Page.

Winnipeg, Man., exports and imports...... 550
— gross postal revenue of................. 732
— live stock marketed at.................. 590
— manufactures........................... 442
— population of........................... 102
Wire communications..................... 714–8
— exports and imports....................520, 536
— manufacture of......................... 398
Wireless apparatus, imports............... 538
— communications........................ 718–29
— stations................................ 718–25
Wood distillation industry................ 400
— for pulpwood, statistics of.............. 274
— manufacture of....................284, 394, 398
— products, exports and imports..........518, 532
—— statistics of manufacture of........... 398
Wood-pulp, exports and imports...........518, 534
— from leading countries.................. 277
— production of........................... 275–7
Woods, Canadian......................... 247–50
— operations.............................. 271–3
Woodstock, Ont., manufactures........... 441
— population of........................... 103
Woodworking industry.................... 398
Wool, production, exports and imports..... 219
— products, exports and imports..........516, 532
—— manufacture of....................... 398
— raw, exports and imports...............516, 532
— waste, manufacture of.................. 398
Workmen's Compensation Board, Alberta..797, 832
—— British Columbia....................797, 832
—— legislation *re*......................793–7, 832–3
—— Manitoba............................ 795–6
—— New Brunswick......................794, 832
—— Nova Scotia.........................793, 832
—— Ontario.............................795, 832
—— Quebec.............................794, 832
—— Saskatchewan........................ 796
—— Yukon............................... 833
Works of art, imports..................... 542
World, area and population of............. 113
— cereal and potato production of the..... 239–44
— gold and silver production.............. 339
— statistics of farm live stock............. 245–6
— trade, Canada's position in............. 483–5
—— geographic distribution of............ 480–3
—— of principal countries................ 484–5
—— value and quantum of................ 476–85
Worsteds and serges, imports............. 532
Wrapping paper, exports and imports......518, 534
Wrecks, shipping, number................. 682

Yarn, cotton, imports..................... 530
—— manufacture of....................... 398
— woollen, imports....................... 532
—— manufacture of....................... 398
Year, principal events of the, 1938-39...... 1151–61
Youth training............................ 814–6
Yugoslavia, trade agreement with......... 469
Yukon and Northwest Territories, lands, classification of.......................27, 1074
— area and description of................. 8
— fur production of....................... 293
— manufactures.......................380–1, 416
— mineral occurrences in—see individual minerals.
—— production of........................ 323
— motor-vehicle regulations............... 662
— mountain peaks in...................... 10
— production, survey of............180, 182, 1169
— population of.......................... 79, 80
— publications *re*—see Dept. of Mines and Resources publications.
— representation in Parliament............ 59, 65
— water powers of......................360, 362
— Workmen's Compensation Ordinance.... 833

Zinc, bounty on........................... 598
— exports and imports....................522, 538
— occurrence, by provinces............... 346–7
— production of.........................319, 347
— spelter, exports of...................... 522

GOV DOC CA1 CS 11-402D 1939
CANADA YEAR BOOK

39685487 GOV PUB

000030851612

A65077 ✓